

**INVENTORY AND ASSESSMENT OF HUMAN REMAINS AND FUNERARY
OBJECTS FROM AMCHITKA, KISKA, AND LITTLE KISKA ISLANDS IN THE
ALEUTIAN ARCHIPELAGO OF ALASKA IN THE COLLECTIONS OF THE
NATIONAL MUSEUM OF NATURAL HISTORY, SMITHSONIAN INSTITUTION**

Lars Krutak and J. Christopher Dudar

Repatriation Office
National Museum of Natural History
Smithsonian Institution
P.O. Box 37012, MRC 138
Washington, D.C. 20013-7012

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EXECUTIVE SUMMARY

In compliance with the National Museum of the American Indian Act (20 U.S.C. Section 80q), this report provides an inventory and assessment of human remains and funerary objects potentially affiliated with the Native Village of Atka, Alaska, in the possession of the National Museum of Natural History (NMNH).

Documentation of the human remains and funerary objects potentially affiliated with the Native Village of Atka was initiated in response to a written request dated May 30, 2001, from Aleutian Pribilof Islands Association (APIA) President Dimitri Philemonof for the repatriation of Unangan (Aleut) human remains and funerary objects from the entire Aleutian and Pribilof Islands region, including the traditional territory of the Atkan people. Examination of the relevant museum records indicates that the NMNH houses the remains of an estimated 56 individuals represented by 46 catalog numbers (Table 1) and 186 funerary objects represented by five catalog numbers (Tables 2 and 3) identified as associated with territories in the Rat Islands once occupied by individuals ancestral to members of the Native Village of Atka.

The evidence reviewed in this report suggests that the remains and objects described here date to the prehistoric period (pre-1740s) and to the historic period of the eighteenth to nineteenth centuries. Human remains of one individual in one catalog number and 182 associated funerary objects in one catalog number were originally collected near an Aleut village site located at Constantine Harbor, Amchitka Island, by Marcus Baker of the U.S. Coast and Geodetic Survey in 1873. These remains were presented to the U.S. National Museum (USNM), later NMNH, that year by William Healey Dall. Human remains of one individual in one catalog number were collected by Dr. J. Hobart Egbert of the U.S. Coast and Geodetic Survey in 1904 on Kiska Island and presented to the USNM in 1905. The human remains of an estimated 10 individuals in seven catalog numbers were acquired by Aleš Hrdlička of the USNM in 1936 on Little Kiska and Kiska Island. The preponderance of evidence also suggests that an unassociated funerary object in one catalog number was collected in 1936 by Hrdlička on Little Kiska Island. Additional human remains of two individuals in one catalog number were acquired by Dr. Olaus J. Murie of the Department of Agriculture in 1937 from an old village site situated on Constantine Harbor, Amchitka Island. Human skeletal remains of an estimated 14 individuals listed under 12 catalog numbers were collected by Aleš Hrdlička of the USNM in 1938 from sites on Amchitka Island. The human remains of two individuals listed under two NMNH catalog numbers were obtained by Warden Mangan of the U.S. Fish and Wildlife Service in 1940 from an old village on Amchitka Island. Finally, the human remains of an estimated 26 individuals listed under 22 catalog numbers and three associated funerary objects in three catalog numbers were presented by Captain Paul Guggenheim of the U.S. Army to the USNM in 1944. The human remains and funerary objects were collected from various sites on Amchitka Island.

Several lines of evidence support the cultural affiliation of these remains and funerary objects to the Native Village of Atka. These include the historic record of local Qax̂un Aleut settlement and land use at Kiska Island, Little Kiska Island, and Amchitka Island, Alaska; the historic record of Unangan mortuary customs; the historic record of Qax̂un resettlement at Atka; NMNH accession and collection records; unpublished field notes from the original collectors; and the taphonomic characteristics of the remains themselves. Taken together, this information constitutes a preponderance of evidence in support of the conclusion that the remains and funerary objects documented in this report are culturally affiliated with the Native Village of Atka. Therefore, it is recommended that the human remains of at least 56 indigenous Alaskan individuals in 46 catalog numbers and 186 funerary objects represented by five catalog numbers be made available for repatriation to the Native Village of Atka.

Table 1. Human Remains from Amchitka Island, Kiska Island, and Little Kiska Island, Alaska, in the Collections of the National Museum of Natural History, Smithsonian Institution.

Catalog No.	Acc. No.	Card Catalog Provenience	Collector	Year Collected	Age in Years	Sex	Cultural Affiliation
P242868	33553	“Constantine Harbor, Amchitka Island”	Marcus Baker	1873	35 to 45	M	Native Village of Atka
P228041	43808	“Kiska, Aleutian Islands”	J. Hobart Egbert	1904	50+	F	Native Village of Atka
P377755	138127	“Little Kiska Island”	Aleš Hrdlička	1936	50+	F	Native Village of Atka
P377756 + Commingled remains	138127	“Little Kiska Island”	Aleš Hrdlička	1936	30+	F	Native Village of Atka
P377757	138127	“Little Kiska Island”	Aleš Hrdlička	1936	35 to 49	M	Native Village of Atka
*P377757 RO-A	138127		Aleš Hrdlička	1936	4 to 6	U	
*P377757 RO-B	138127		Aleš Hrdlička	1936	10 to 14	U	
*P377757 RO-C	138127		Aleš Hrdlička	1936	30+	F	
P377758	138127	“Little Kiska Island”	Aleš Hrdlička	1936	50+	F	Native Village of Atka
P377758A	138127	“Little Kiska Island”	Aleš Hrdlička	1936	30 to 40	M	Native Village of Atka
P377758B	138127		Aleš Hrdlička	1936	35+	M	Native Village of Atka
P377759	138127	“Kiska Harbor, Big Kiska Island”	Aleš Hrdlička	1936	35 to 45	F	Native Village of Atka
P378250	145319	“Amchitka Island”	O. J. Murie	1937	45+	M	Native Village of Atka
*P378250 RO-A	145319	“Amchitka Island”	O. J. Murie	1937	35+	U	
P378691	149653	“Amchitka Island”	Aleš Hrdlička	1938	35 to 45	M	Native Village of Atka
*P378691 RO-A	149653		Aleš Hrdlička	1938	25 to 30	M	
P378692	149653	“Amchitka Island”	Aleš Hrdlička	1938	25 to 35	M	Native Village of Atka
P378693	149653	“Amchitka Island”	Aleš Hrdlička	1938	35 to 50	M	Native Village of Atka
P378694	149653	“Amchitka Island”	Aleš Hrdlička	1938	16 to 18	M	Native Village of Atka
P378695	149653	“Amchitka Island”	Aleš Hrdlička	1938	14 to 17	M	Native Village of Atka
P378696	149653	“Amchitka Island”	Aleš Hrdlička	1938	13 to 15	U	Native Village of Atka
P378697	149653	“Amchitka Island”	Aleš Hrdlička	1938	50+	F	Native Village of Atka
P378698	149653	“Amchitka Island”	Aleš Hrdlička	1938	35 to 45	M	Native Village of Atka
*P378698 RO-A	149653		Aleš Hrdlička	1938	4 to 6	U	
P378699	149653	“Amchitka Island”	Aleš Hrdlička	1938	35 to 50 years	M	Native Village of Atka

Table 1 (Continued). Human Remains from Amchitka Island, Kiska Island, and Little Kiska Island, Alaska, in the Collections of the National Museum of Natural History, Smithsonian Institution.

Catalog No.	Acc. No.	Card Catalog Provenience	Collector	Year Collected	Age in Years	Sex	Cultural Affiliation
P378700	149653	"Amchitka Island"	Aleš Hrdlička	1938	50 to 65	F	Native Village of Atka
P378701	149653	"Amchitka Island"	Aleš Hrdlička	1938	35 to 50	M	Native Village of Atka
P378702	149653	"Amchitka Island"	Aleš Hrdlička	1938	9 to 13	U	Native Village of Atka
P379179	158314	"Old village on Amchitka Is."	Warden Mangan	1940	30 to 40	M	Native Village of Atka
P379180	158314	"Old village on Amchitka Is."	Warden Mangan	1940	30 to 45	U	Native Village of Atka
P379697	168967	"Amchitka (site 3)"	Paul Guggenheim	1944	8 to 11	U	Native Village of Atka
P379698	168967	"Amchitka (site 3)"	Paul Guggenheim	1944	1 to 2	U	Native Village of Atka
P379699	168967	"Amchitka (site 9)"	Paul Guggenheim	1944	40 to 50	M	Native Village of Atka
*P379699 RO-A	168967		Paul Guggenheim	1944	20 to 24	M	
P379700	168967	"Amchitka (site 9)"	Paul Guggenheim	1944	14 to 17	M	
*P379700 RO-A	168967		Paul Guggenheim	1944	40 to 50	M	Native Village of Atka
P379701	168967	"Amchitka (site 9)"	Paul Guggenheim	1944	18 to 25	F	
P379702	168967	"Amchitka (site 9)"	Paul Guggenheim	1944	40 to 50	M	
*P379702 RO-A	168967		Paul Guggenheim	1944	12 to 14	U	Native Village of Atka
P379703	168967	"Amchitka (site 9)"	Paul Guggenheim	1944	30 to 45	F	
P379704	168967	"Amchitka (site 9)"	Paul Guggenheim	1944	35+	F	
P379705	168967	"Amchitka (site 9)"	Paul Guggenheim	1944	8 to 11	U	Native Village of Atka
P379706	168967	"Amchitka (site 9)"	Paul Guggenheim	1944	30 to 45	M	Native Village of Atka
P379707	168967	"Amchitka (site 9)"	Paul Guggenheim	1944	10 to 12	U	Native Village of Atka
P379708	168967	"Amchitka (site 9)"	Paul Guggenheim	1944	7 to 10	U	Native Village of Atka
P379709	168967	"Amchitka (site 16)"	Paul Guggenheim	1944	60+	F	Native Village of Atka
P379710	168967	"Amchitka (site 16)"	Paul Guggenheim	1944	45 to 55	M	Native Village of Atka
P379711	168967	"Amchitka (site 16)"	Paul Guggenheim	1944	25 to 35	M	Native Village of Atka
*P379711 RO-A	168967		Paul Guggenheim	1944	30 to 50	U	

Table 1 (Continued). Human Remains from Amchitka Island, Kiska Island, and Little Kiska Island, Alaska, in the Collections of the National Museum of Natural History, Smithsonian Institution.

Catalog No.	Acc. No.	Card Catalog Provenience	Collector	Year Collected	Age in Years	Sex	Cultural Affiliation
P379712	168967	"Amchitka (site 25)"	Paul Guggenheim	1944	45+	M	Native Village of Atka
P379713	168967	"Amchitka (site 25)"	Paul Guggenheim	1944	16 to 18	M	Native Village of Atka
P379714	168967	"Amchitka (site 25)"	Paul Guggenheim	1944	45 to 49	M	Native Village of Atka
P379715	168967	"Amchitka (site 25)"	Paul Guggenheim	1944	60+	F	Native Village of Atka
P379716	168967	"Amchitka (site 25)"	Paul Guggenheim	1944	2 to 4	F	Native Village of Atka
P379717	168967	"Amchitka (site 25)"	Paul Guggenheim	1944	8 to 10	U	Native Village of Atka
P379718	168967	"Amchitka (site 25)"	Paul Guggenheim	1944	35+	M	Native Village of Atka

Notes: (+) Commingled remains found in a catalog number are not associated with the main individual represented by the catalog number, but may be associated with more than one individual in other catalog numbers within the site provenience, but cannot be positively reassociated. Thus, they do not contribute to the minimum number of individuals (MNI) for the site.

(*) The RO letter designations refer to subdivisions of existing catalog numbers and represent distinct individuals that cannot be positively reassociated to any other individual within the site provenience.

Table 2. Associated Funerary Objects from Amchitka Island, Alaska, in the Collections of the National Museum of Natural History, Smithsonian Institution.

Catalog No.	Acc. No.	Card Catalog Provenience	Collector	Year Collected	Funerary Object	Catalog No. of Associated Burial	Cultural Affiliation
A13029	3035	“Constantine Harbor”	Marcus Baker	1873	6 Iron axe fragments and 176 beads	P242868	Native Village of Atka
A387677	168967	“Kirilof Cliff Site, Amchitka”	Paul Guggenheim	1944	1 Stone saw fragment	P379709	Native Village of Atka
A387678	168967	“Kirilof Cliff Site, Amchitka”	Paul Guggenheim	1944	1 Stone saw fragment	P379709	Native Village of Atka
A387679	168967	“Kirilof Cliff Site, Amchitka”	Paul Guggenheim	1944	1 Stone saw fragment	P379709	Native Village of Atka

Table 3. Unassociated Funerary Object from Little Kiska Island, Alaska, in the Collections of the National Museum of Natural History, Smithsonian Institution.

Catalog No.	Acc. No.	Card Catalog Provenience	Collector	Year Collected	Funerary Object	Cultural Affiliation
E378912	143191	“Little Kiska Island”	Aleš Hrdlička	1936	1 Metal cross	Native Village of Atka

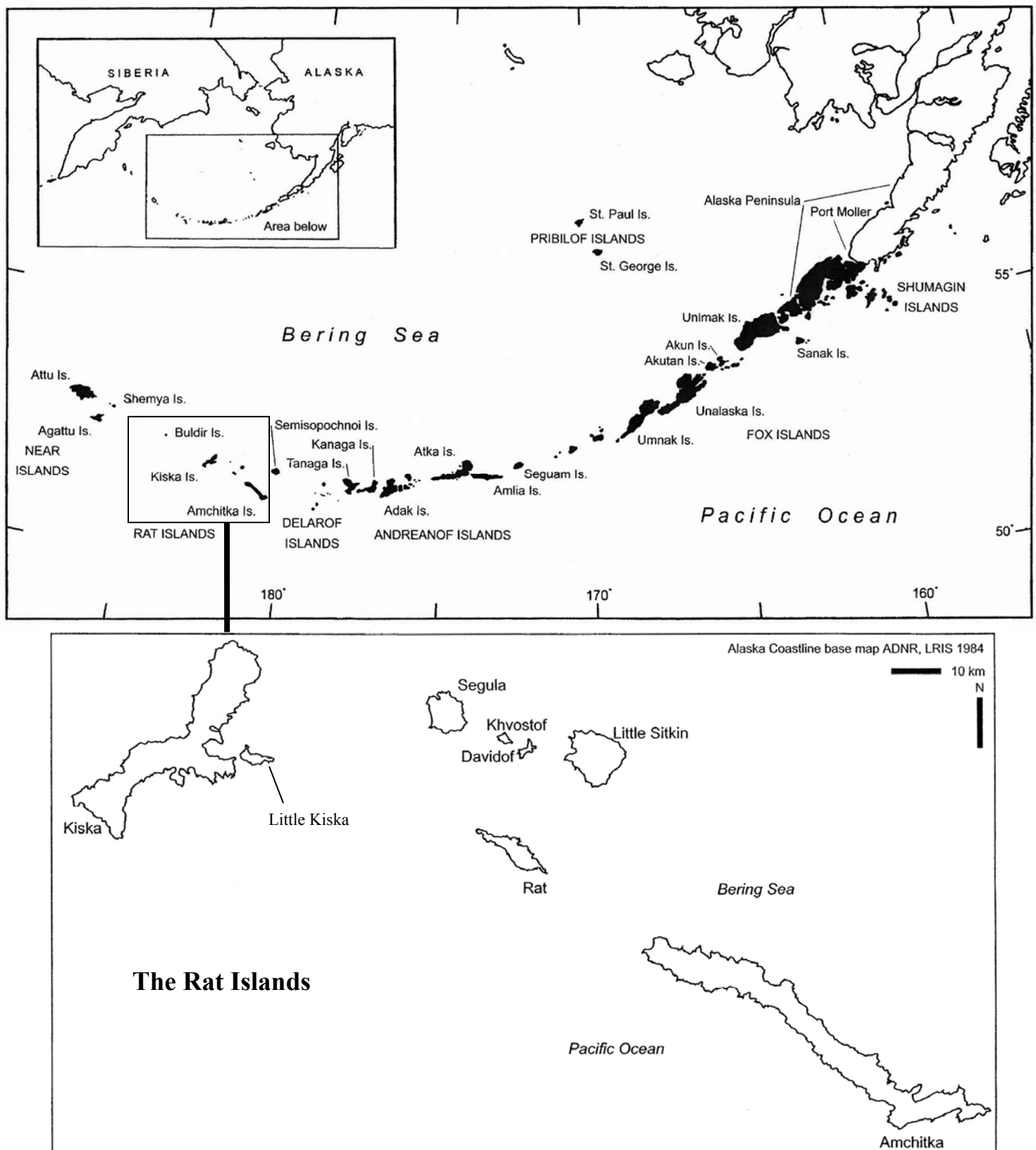


Figure 1. Maps of Amchitka Island, Kiska Island, Little Kiska Island, and the Aleutian Archipelago (after Funk 2011:28 and Veltre and Smith 2010:489).

TABLE OF CONTENTS

EXECUTIVE SUMMARY	ii
LIST OF TABLES AND FIGURES.....	xi
LIST OF ABBREVIATIONS.....	xiii
I. INTRODUCTION.....	1
II. HISTORY OF THE REQUEST.....	2
III. LEGISLATIVE REQUIREMENTS	8
Cultural Affiliation	8
Object Category Definitions.....	9
IV. CULTURAL, BIOLOGICAL, AND HISTORICAL BACKGROUND.....	10
Prehistoric Period	10
Biological Population History	13
Contact Period.....	18
Warfare and Military Leadership	22
Religious Life.....	24
Unangan Mortuary Practices of the Early Historic Period	26
V. HUMAN REMAINS AND FUNERARY OBJECTS FROM AMCHITKA, KISKA, AND LITTLE KISKA ISLANDS, ALASKA, IN THE COLLECTIONS OF THE NATIONAL MUSEUM OF NATURAL HISTORY	32
Marcus Baker on Amchitka Island (1873).....	32
Cultural Affiliation: P242868 and A13029	34
J. Hobart Egbert on Kiska Island (1904).....	35
Cultural Affiliation: P228041	36
Aleš Hrdlička on Kiska and Little Kiska Island (1936).....	36
Cultural Affiliation: Accessions 138127 and 143191	40
Olaus J. Murie on Amchitka Island (1937).....	41
Cultural Affiliation: P378250.....	43
Aleš Hrdlička on Amchitka Island (1938)	44

Cultural Affiliation: Accession 149653.....	47
Warden Mangan on Amchitka Island (1940).....	48
Cultural Affiliation: P379179 and P379180.....	49
Paul Guggenheim on Amchitka Island (1943-1944)	50
Site 25.....	51
Site 16.....	53
Site 9.....	54
Site 3.....	55
Cultural Affiliation: Accession 168967.....	56
VI. SUMMARY OF CULTURAL AFFILIATION AND REPATRIATION RECOMMENDATIONS ..	57
ACKNOWLEDGEMENTS.....	59
REFERENCES CITED.....	60
APPENDIX A: POSTCRANIAL METRIC ANALYSIS OF HRDLIČKA'S PRE-ALEUT AND ALEUT HUMAN REMAINS IN THE COLLECTIONS OF THE NATIONAL MUSEUM OF NATURAL HISTORY	68
APPENDIX B: DOCUMENTATION OF HUMAN REMAINS AT THE NATIONAL MUSEUM OF NATURAL HISTORY	72
APPENDIX C: GLOSSARY	75

LIST OF TABLES AND FIGURES

Table 1.	Human Remains from Amchitka Island, Kiska Island, and Little Kiska Island, Alaska, in the Collections of the National Museum of Natural History, Smithsonian Institution.....	iv
Table 2.	Associated Funerary Objects from Amchitka Island, Alaska, in the Collections of the National Museum of Natural History, Smithsonian Institution.....	vii
Table 3.	Unassociated Funerary Object from Little Kiska Island, Alaska, in the Collections of the National Museum of Natural History, Smithsonian Institution.....	vii
Table 4.	Human Remains Collected by Marcus Baker on Amchitka Island, Alaska, in the Collections of the National Museum of Natural History, Smithsonian Institution	33
Table 5.	Funerary Objects Collected by Marcus Baker on Amchitka Island, Alaska, in the Collections of the National Museum of Natural History, Smithsonian Institution	33
Table 6.	Human Remains Collected by J. Hobart Egbert on Kiska Island, Alaska, in the Collections of the National Museum of Natural History, Smithsonian Institution	36
Table 7.	Human Remains Collected by Aleš Hrdlička on Little Kiska and Kiska Island, Alaska, in the Collections of the National Museum of Natural History, Smithsonian Institution	39
Table 8.	Funerary Object Collected by Aleš Hrdlička on Little Kiska Island, Alaska, in the Collections of the National Museum of Natural History, Smithsonian Institution	40
Table 9.	Human Remains Collected by Olaus J. Murie on Amchitka Island, Alaska, in the Collections of the National Museum of Natural History, Smithsonian Institution.....	43
Table 10.	Human Remains Collected by Aleš Hrdlička on Amchitka Island, Alaska, in the Collections of the National Museum of Natural History, Smithsonian Institution.....	47
Table 11.	Human Remains Collected by Warden Mangan on Amchitka Island, Alaska, in the Collections of the National Museum of Natural History, Smithsonian Institution.....	49

Table 12.	Human Remains Collected by Paul Guggenheim on Amchitka Island, Alaska, in the Collections of the National Museum of Natural History, Smithsonian Institution.....	53
Table 13.	Funerary Objects Collected by Paul Guggenheim on Amchitka Island, Alaska, in the Collections of the National Museum of Natural History, Smithsonian Institution.....	54
Table 14.	Postcranial Long Bone Length Summary Statistics of Paleo- and Neo-Aleut used in Welch's Two-tailed T-tests.....	69
Table 15.	Postcranial Long Bone Robusticity Index Summary Statistics of Paleo- and Neo-Aleut used in Welch's Two-tailed T-tests.....	70
Figure 1.	Maps of Amchitka Island, Kiska Island, Little Kiska Island, and the Aleutian Archipelago.....	viii
Figure 2.	Russian Orthodox Cross (E378912) from Little Kiska Island.....	40
Figure 3.	Amchitka Island Sites Mapped by Paul Guggenheim.....	50
Figure 4.	Box Plot of Male Neo- and Paleo-Aleut Femur and Tibia Maximum Length on Y-axis.....	69
Figure 5.	Box Plot of Male Neo- and Paleo-Aleut Humerus, Ulna, and Radius Maximum Length on Y-axis.....	70
Figure 6.	Box Plot of Female Neo- and Paleo-Aleut Femur and Tibia Maximum Length on Y-axis.....	71
Figure 7.	Box Plot of Female Neo- and Paleo-Aleut Humerus, Ulna, and Radius Maximum Length on Y-axis.....	71

LIST OF ABBREVIATIONS

AMM: Army Medical Museum
ANCSA: Alaska Native Claims Settlement Act
APIA: Aleutian Pribilof Islands Association
BIA: Bureau of Indian Affairs
IRA: Indian Reorganization Act
MNI: Minimum Number of Individuals
MOA: Memorandum of Agreement
NAGPRA: Native American Graves Protection Repatriation Act
NMAI Act: National Museum of the American Indian Act
NMNH: National Museum of Natural History
RO: Repatriation Office
USAEC: United States Atomic Energy Commission
USNM: United States National Museum
WAAPP: Western Aleutian Archaeological and Paleobiological Project

I. INTRODUCTION

The National Museum of the American Indian Act of 1989 (20 U.S.C. Section 80q), as amended in 1996, requires the Smithsonian Institution to inventory and identify the tribal origins of all Native American human remains and funerary objects in its possession. Tribes culturally affiliated with human remains and funerary objects at the National Museum of Natural History (NMNH) are to be notified and consulted regarding the disposition of the remains and objects. Human skeletal remains and funerary objects determined to be culturally affiliated will be expeditiously returned to the culturally affiliated tribe upon their request. In compliance with this law, this report documents the acquisition history of human remains and funerary objects from Amchitka, Kiska, and Little Kiska islands in the Aleutian Archipelago of Alaska and assesses their cultural affiliation to the Native Village of Atka. Founded in 1939, the Native Village of Atka is a federally recognized tribe and governing body of local tribal membership representing the political, social, and cultural interests "of Aleuts having a common bond of residence in the Village of Atka, Alaska" (U.S. Department of the Interior 1940:2).

The documentation in this report was undertaken in response to an official repatriation request dated May 30, 2001, from Aleutian Pribilof Islands Association (APIA)¹ President Dimitri Philemonof. On behalf of the Native Village of Atka, Philemonof presented a memorandum of agreement signed on March 12, 2001, by Atkan leaders vesting the APIA with authority to request the repatriation of human remains and funerary objects from the traditional territory of the Atkan people so that they could be returned to the Native Village of Atka.

The museum collections from Amchitka, Kiska, and Little Kiska islands include human remains and funerary objects dating to the prehistoric period (pre-1740s) and historic period of the eighteenth to nineteenth centuries. The human remains of an estimated 56 individuals in 46 catalog numbers and 186 funerary objects in five catalog numbers were collected from these localities between 1873 and 1944.

An important part of the documentation process was an examination of the human remains themselves. This examination was conducted by the Repatriation Osteology Laboratory as part of the inventory and physical documentation process. The skeletal remains described in this report were inventoried to provide a detailed record of elements and their condition. Observations were made on the age at death, sex, possible injuries or cause of death, other evidence of pathology, and presence of any cultural modifications that might contribute to the determination of cultural affiliation. The physical documentation supplements and corroborates the information assembled from museum records and other historical documents and provides unique details about these individuals and their personal histories.

¹ The APIA is the regional non-profit association for the inhabitants of the Aleutian Islands. It represents the interests of all 13 federally recognized Unangan tribes, including the Native Village of Atka, and is comprised of tribal members from each of these communities.

The findings of this report are based on the NMNH's master computer catalog, original accession documents, unpublished field research notebooks sent to the museum by the original collectors, card catalog files, oral histories, and historical documents (e.g., maps, census records, ethnohistorical accounts). Secondary and electronic sources were consulted as appropriate.

This report is divided into six sections. Following the introduction, Section II outlines the history of the repatriation request and communications regarding this request. Section III defines the legislative requirements that must be met for repatriation requests for human remains and funerary objects. Section IV details the cultural and historical background of the indigenous people of Amchitka, Kiska, and Little Kiska islands. Section V reviews the collection history of the human remains and funerary objects and evaluates their cultural affiliation. The sixth and final section summarizes the findings of the report and provides a recommendation for repatriation. The complete range of osteological and funerary object data documented for this inventory and assessment are available upon request. For further information, please contact the Repatriation Office at the National Museum of Natural History (<http://anthropology.si.edu/repatriation/>).

II. HISTORY OF THE REQUEST

The original request for the identification and return of human remains and funerary objects specific to the Native Village of Atka was presented in a May 30, 2001, letter to the Repatriation Office by Dimitri Philemonof, President of the Aleutian Pribilof Islands Association (APIA). This letter also requested the return of ancestral remains and funerary objects from the entire Aleutian and Pribilof Islands region, including portions of the Alaska Peninsula which are included in the traditional territory of the Unangan people. Moreover, it requested that the Repatriation Office and Smithsonian Institution discontinue any documentation activities involving the human remains. Anyone seeking to examine or study the human remains was to be directed to the APIA cultural heritage office.

The APIA was given signature authority by all of the federally recognized Aleut tribes of the Aleutian Archipelago to act as their repatriation representative, and memoranda of agreement (MOA) supporting the APIA action were appended to the May 30, 2001, request. The MOA was signed by Atka IRA Council President Mark Snigaroff on March 12, 2001. Snigaroff currently serves in this position for the Native Village of Atka.

Prior to the official letters of request, however, the Repatriation Office had been in contact with the Native Village of Atka. According to Repatriation Office files, Case Officer Chuck Smythe forwarded a "Summary of Ethnological Objects in the National Museum of Natural History Associated with the Aleut Culture" on January 31, 1997, to Nick Nevzoroff, then President of the Native Village of Atka. On February 13, 1997, Smythe forwarded another Aleut

Ethnological Objects summary to the Native Village of Atka which was received by Mark Snigaroff.

On May 17, 1998, Repatriation Case Officer Stuart Speaker sent an inventory of physical and archaeology collections for the Aleutian region which was received by the Native Village of Atka on May 27.

According to Repatriation Office files, there was no additional communication between the Native Village of Atka and the NMNH until the official request letter was received on May 30, 2001.

Between May 2001 and November 2005, there were numerous communications between the Repatriation Office and APIA focusing on the repatriation request concerning human remains and funerary objects from the Aleutian and Pribilof Islands region. The majority of this correspondence occurred between Repatriation Case Officer Dorothy Lippert and Allison Young, Cultural Heritage Director of the APIA at that time.

On June 29, 2001, Lippert wrote Young to discuss the Repatriation Office's need to document and photograph the human remains as part of the repatriation process. Telecommunications ensued and Repatriation Office staff were invited on September 6, 2001, to discuss the request and documentation process at the forthcoming Aleut Corporation meeting in Alaska.

On October 11, 2001, Repatriation Program Manager Bill Billeck, NMNH Physical Anthropologist Steve Ousley, and Lippert attended the Aleut Shareholders Annual Meeting and Village Seminar in Anchorage to speak about the APIA request. The following day, Billeck, Ousley, and Lippert visited the APIA offices in Anchorage to further discuss the repatriation request and importance of documentation so that the repatriation process could move forward.

Communication between the Repatriation Office and APIA resumed in 2003. On October 12, 2003, Lippert participated in a teleconference with Young and the APIA repatriation committee to discuss the importance of the documentation process. On October 21, 2003, Lippert forwarded a letter to Young requesting permission to resume documentation of the Unangan human remains, because it is important to determine the physical and biological characteristics of the individuals, and the minimum number of individuals present in the NMNH collections. Another teleconference including APIA members, Young, and Lippert was held on November 12, 2003. The purpose of the meeting was to reconsider the Repatriation Office's documentation request, but no decision was reached. In 2005, additional Repatriation Office requests to resume documentation of the Unangan human remains were not addressed by the APIA. However, Young visited the NMNH on September 19-21, 2005, to view Aleutian collections and discuss the APIA repatriation request with Lippert and Billeck.

On February 27, 2006, Ousley contacted new APIA Cultural Heritage Director Millie McKeown to request permission to digitize Aleutian remains for a craniometric study he was preparing. McKeown received permission from 12 of the 13 Unangan communities represented by the APIA and Ousley completed the research project.

According to Repatriation Office files, there was no further communication between the APIA and the NMNH until 2010. However, on April 24, 2009, the Native Village of Nikolski IRA Council and Dora Johnson, President of the Chaluka Corporation,² sent a letter to Andrea Hunter, Chair of the NMNH Repatriation Review Committee. This letter voiced concern over medical and radiological research conducted in 2002 on human remains from nearby Kagamil Island by NMNH Department of Anthropology staff and other researchers affiliated with the Smithsonian Institution (see Frohlich, Harper, and Gilberg 2002). On June 17, 2009, Billeck forwarded an official response to Johnson explaining that the Repatriation Office had informally agreed to suspend documentation efforts while the importance of the documentation was discussed with the Unangan community. However, the Department of Anthropology and NMNH did not concur with this agreement, because museum policy allows for collections to be researched until they are determined to be culturally affiliated in a repatriation report approved by museum administration. Billeck respectfully requested for physical documentation to continue so that the repatriation process could move forward. He reiterated that the Repatriation Office would abide with the informal agreement to halt repatriation documentation while the Unangan continued to deliberate on the matter. Billeck invited Unangan representatives to visit the NMNH for further consultation, and also offered to travel to Alaska to discuss the importance of the documentation process with community leaders.

On April 20, 2010, Repatriation Case Officer Chris Wolff introduced himself via email and telephone to APIA Cultural Heritage Director Millie McKeown. Wolff provided his contact details and stated that he was assigned to address all of the repatriation requests in the Aleutian region that were outlined in Philemonof's May 30, 2001, letter.

McKeown replied to Wolff via telephone on April 21, 2010. She left a voicemail message stating that she was very happy to learn that the Repatriation Office was continuing its work on the APIA request and she looked forward to communicating with Wolff in the near future. During the next two months, McKeown and Wolff exchanged multiple emails and telephone calls regarding the APIA request. On June 16, 2010, Wolff noted in an email to McKeown that he would prioritize his research to focus on Unga Island and Kagamil Island material from the eastern Aleutians.

² The Chaluka Corporation is the for-profit entity established under the Alaska Native Claims Settlement Act (ANCSA) for the Native Village of Nikolski, Alaska. The Native Village of Nikolski is located on Umnak Island in the western Aleutian Islands.

Wolff emailed McKeown again on August 25, 2010. He mentioned the possibility of travelling to Alaska for a consultation visit in the near future and asked if Unangan groups might be gathering for any special events, since this would provide an opportunity to consult on the multiple repatriation cases detailed in the APIA request.

During September and October 2010, Wolff and McKeown exchanged additional emails regarding a possible consultation visit in Alaska. McKeown emailed Wolff on October 8, 2010, noting that the APIA's annual board meeting was scheduled for the week of December 6, 2010, and that Wolff could be scheduled to speak on December 9th or 10th. She confirmed that APIA board members, including Mark Snigaroff of the Native Village of Atka, would be present at the meeting. Additional logistical emails were exchanged between McKeown and Wolff throughout the month of October until the consultation visit at the APIA in Anchorage.

On December 9, 2010, Repatriation Office Program Manager Bill Billeck accompanied Wolff to the APIA office consultation. At the meeting, Billeck and Wolff met with McKeown, Snigaroff, and others to discuss the APIA repatriation request, consultation procedures, and documentation of the human remains and funerary objects. At the conclusion of the consultation, Billeck and Wolff received permission from the APIA and its member communities to proceed with documentation of the human remains and funerary objects listed in the original repatriation request letter.

No further communication between the Repatriation Office and the APIA was recorded until June 29, 2011,³ when Case Officer Lars Krutak assumed responsibility for the request and sent an introductory email to McKeown stating that he was now responsible for the Aleutian region and would address the APIA request through a regional approach. More specifically, Krutak stated that he would begin working on the Unga Island request followed by the Near Islands (Attu, Agattu, and Shemya) and Rat Islands (Amchitka, Kiska, and Little Kiska).

On December 2, 2011, Krutak emailed McKeown again with an update. He stated that he would begin work on the Unga case report and that letters of introduction had been forwarded to the Unga Tribal Council and its President, Mr. John Foster. On December 22, 2011, Krutak emailed and posted an introductory letter to Mark Snigaroff of the Native Village of Atka stating that he was now responsible for repatriation cases in the Aleutian region and would address the Atka request in the near future. According to preliminary research, Krutak noted that forthcoming repatriation cases involving the Near Islands and Rat Islands would likely involve the Native Village of Atka, since the former residents of these now uninhabited isles were displaced in the past and their descendants are members of the Native Village of Atka, the only federally recognized Native group of the western Aleutians. Following these introductory letters,

³ Between December 9, 2010 and June 29, 2011, the Repatriation Office was in direct communication with two federally-recognized Aleut tribes, the Native Village of Unga and Aleut Community of St. Paul Island, regarding ongoing repatriation cases (see Krutak 2013 and Wolff et al. 2012).

Krutak telephoned Snigaroff's office and the Atka IRA Council on February 1, 2012, to confirm that his original correspondence had been received. No answer was received and Krutak left a telephone message outlining his previous attempts to make contact and background information concerning the case.

On September 27, 2012, Krutak telephoned Snigaroff's office and left a voicemail message stating that he had been invited by the Ounalashka Corporation to present a talk focusing on Aleutian repatriation cases on October 12, 2012, at the 40th Aleut Shareholders Annual Meeting and Village Seminar in Anchorage. Krutak stated that the invitation was the result of several previous communications with Unangan representatives, especially Aquilina Lestenkof, Director of the Aleut community of St. Paul Island, Alaska, who visited Krutak and the Repatriation Office on May 16, 2012, in Washington, D.C., for the repatriation of two human remains from St. Paul Island. On September 27, 2012, Krutak mailed a letter informing Snigaroff of his October 2012 visit to Anchorage. He noted that he could answer any questions and provide more details about the Atka request and other Aleutian cases if Atka tribal representatives would be present at the meeting.

On October 12, 2012, Krutak gave a presentation at the Aleut Shareholders Meeting and Village Seminar and met with several Unangan representatives of federally recognized tribes regarding their existing repatriation requests. These individuals were: Mark Snigaroff, President of the Atka IRA Council; Crystal Dushkin, Atka IRA Tribal Council Member; Vincent Tutiakoff, Sr., Qawalangin Tribe of Unalaska and Chairman of the Ounalashka Corporation, Unalaska, Alaska; Sharon Svarny-Livingston, Administrator of the Qawalangin Tribe of Unalaska, Alaska; and Bruce Foster, Sr., President of the Unga Tribal Council, Sand Point, Alaska. Krutak provided Snigaroff with an update on the Atka request and stated that he had begun research for the report but that he would address the Unga request first. Dushkin noted that she believed prehistoric remains from the Near Islands and Rat Islands should be returned and reburied where they were originally collected, since these people were not baptized in the Russian Orthodox tradition. Snigaroff and Dushkin were pleased to learn that the NMNH would soon be working on the Atka request.

Krutak emailed McKeown and APIA Environmental Safety Manager Karen Pletnikoff on March 11, 2013, with an update regarding his progress on the APIA repatriation request. He stated that the St. Paul Island repatriation took place in 2012 and that the Unga Island report was currently in curator review. Krutak also spoke about his presentation at the Aleut Shareholders Meeting and that he would begin work on the Rat Islands (Hawadaġ) region in the near future. Krutak added that several of the forthcoming cases would involve prehistoric remains and that the descendants of these individuals are currently spread across the Aleutian Archipelago. Thus, discussions about the repatriation of these individuals should be at the pan-Unangan level. Therefore, Krutak expressed his interest in developing a pan-Unangan dialogue concerning these cases so that all parties will be informed. Krutak ended his letter by stating that he would be

attending the Alaskan Anthropological Association meetings in Anchorage in the coming week and that he would be available to meet with APIA staff should the opportunity arise. He stated that one of the papers he would deliver at the conference focused on recent NMNH repatriations in Alaska, and future cases involving the Aleutians.

On March 14, 2013, Pletnikoff contacted Krutak by email. She noted that McKeown was busy with an APIA fundraising event but that the APIA was "very interested in [the] opportunity to assist in the repatriation of our ancestors." She noted that she would be free to meet with Krutak while he was in Anchorage.

On March 15, 2013, Krutak visited APIA headquarters and Pletnikoff in Anchorage. A lengthy discussion followed on repatriation and the prehistoric remains from the Aleutian Islands in the collections of the NMNH. It was agreed that any discussions regarding the repatriation of prehistoric remains needed to be at the pan-Unangan level. In turn, it was noted that the APIA (the entity that submitted the original 2001 repatriation request), the Aleut Corporation, and federally recognized tribes should all be in communication concerning future repatriation cases and updates concerning them. With this in mind, Pletnikoff asked Krutak to forward her a copy of the PowerPoint presentation he gave at the 2012 Aleut Shareholders Conference which provided a regional view of the approximate number of Unangan human remains and funerary objects in the collections of the NMNH, as well as a tentative timeline for addressing each case. She also noted that there was a new Tribal Administrator for the Atka IRA Council. Krutak emailed Pletnikoff and McKeown his PowerPoint presentation on March 18, 2013.

On April 17, 2013, Krutak emailed Pletnikoff for information concerning the name and contact details of the new Atka IRA Council Tribal Administrator. Pletnikoff replied later that day with this information and asked if she could provide Atka Tribal Administrator Oleana Nelson with Krutak's contact details, as well as the PowerPoint presentation from the 2012 Aleut Shareholders Conference. Krutak replied that the PowerPoint could be shared and he thanked Pletnikoff for her assistance.

Krutak emailed Nelson with a letter of introduction on May 7, 2013. He provided background details concerning the APIA and Atka request, including past communications between the Repatriation Office and Snigaroff. Krutak also introduced Repatriation Case Officer Melissa Powell who would assist Krutak with addressing the APIA and Atka requests by working on the Near Islands report. Krutak stated that he looked forward to working with the Native Village of Atka and would be pleased to answer any questions that may arise as a result of these cases.

On October 30, 2013, Krutak emailed Snigaroff, Nelson, Pletnikoff, and McKeown with an update concerning the APIA repatriation request, Near Islands, and Rat Islands cases. He stated that work had begun on these reports and that once completed he would begin to address a

third report focusing on human remains and potential funerary objects from Ilak, Tanaga, and Atka Island itself. Krutak reiterated his desire to keep everyone in touch with progress on these reports and if anyone would like additional information they should not hesitate to contact him. Later that day, Krutak also contacted Atka IRA Council member Crystal Dushkin with a similar update regarding the Repatriation Office's progress on these cases. Krutak asked Dushkin if she would like to receive regular updates so that additional Atka community members would be informed.

Dushkin replied to Krutak on October 31, 2013. She stated that she appreciated the previous message and would like to be copied on all correspondence concerning the Atka repatriation request. The following day Krutak and Dushkin exchanged more detailed contact information. Krutak also introduced Powell who would be working on the Near Islands report and stated that she would copy Dushkin on any further updates.

Dushkin replied to Krutak on November 13, 2013. She stated her interest in receiving continued updates and that she also had a new position with the Native Village of Atka: Director of Cultural Affairs.

On March 1, 2014, Krutak wrote Dushkin to provide a report status update, noting that progress was being made. Moreover, he inquired if current residents of the Native Village of Atka traveled to the Rat Islands for subsistence purposes. He also asked if there were Atkan residents who claimed ancestry to the peoples formerly inhabiting Amchitka, Kiska, and Little Kiska islands. However, no reply was received.

III. LEGISLATIVE REQUIREMENTS

Cultural Affiliation

The NMAI Act directs the Secretary of the Smithsonian Institution to identify the "tribal origins" (cultural affiliation) of collections, but does not define the term "cultural affiliation." The 1996 amendments to the NMAI Act require the Smithsonian to employ the definitions used in the Native American Graves Protection and Repatriation Act (NAGPRA) for unassociated funerary objects, sacred objects, and objects of cultural patrimony and assess the cultural affiliation of these items. To do so, it is necessary to employ the definition of "cultural affiliation" as defined by the NAGPRA regulations:

Cultural affiliation means that there is a relationship of shared group identity [that] can reasonably be traced historically or prehistorically between members of a present-day Indian tribe or Native Hawaiian organization and an identifiable earlier group. Cultural affiliation is established when the preponderance of the evidence – based on geographical, kinship, biological, archeological, linguistic, folklore, oral tradition, historical evidence, or other

information or expert opinion – reasonably leads to such a conclusion [43 C.F.R. Part 10, Section 10.2(e)].

Object Category Definitions

The NMAI Act defines a funerary object as "an object that, as part of a death rite or ceremony of a culture, is intentionally placed with individual human remains, either at the time of burial or later" (20 U.S.C. 80q-14). The NAGPRA defines associated funerary objects as:

[O]bjects that, as a part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later, and both the human remains and associated funerary objects are presently in the possession or control of a Federal agency or museum, except that other items exclusively made for burial purposes or to contain human remains shall be considered as associated funerary objects [25 U.S.C. 3001(3)A].

The NAGPRA defines unassociated funerary objects as:

[O]bjects that, as a part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later, where the remains are not in the possession or control of the Federal agency or museum and the objects can be identified by a preponderance of the evidence as related to specific individuals or families or to known human remains or, by a preponderance of the evidence, as having been removed from a specific burial site of an individual culturally affiliated with a particular Indian tribe [25 U.S.C. 3001(3)B].

The NAGPRA regulations present a slightly expanded definition:

Funerary objects means items that, as part of a death rite or ceremony of a culture, are reasonably believed to have been placed intentionally at the time of death or later with or near individual human remains. Funerary objects must be identified by a preponderance of the evidence as having been removed from a specific burial site of an individual affiliated with a particular Indian tribe or Native Hawaiian organization or as being related to specific individuals or families or to known human remains. The term burial site means any natural or prepared physical location, whether originally below, on, or above the surface of the earth, into which, as part of the death rite or ceremony of a culture, individual human remains were deposited, and includes rock cairns or pyres which do not fall within the ordinary definition of gravesite [43 C.F.R. Part 10, Section 10.2(d)(2)].

IV. CULTURAL, BIOLOGICAL, AND HISTORICAL BACKGROUND

Prehistoric Period

Before the twentieth century, the indigenous inhabitants of the Rat Islands were known as the Qa̋xun in the Western Aleut dialect of the Unanga̋ (Aleut) language (Woodbury 1984:49). Their dialect was different from the neighboring Atkan people and is now extinct (Bergslund 1997). Today, none of the many islands that comprise the Rat Island archipelago are inhabited year-round. However, some of these islands were utilized for subsistence resources by the residents of the Native Village of Atka into the mid-twentieth century (Turner 1970:124).

The name "Rat Islands" was first applied to the region in the 1770s by Russian fur traders. About that time a Japanese ship wrecked at Hawada̋ (Rat Island) and the rats from the vessel infested the island (Black 1984:52), eventually spreading to neighboring isles via Russian cargo ships.

Archaeological evidence suggests that the Aleuts occupied the Rat Islands as early as 4700 BP (Corbett et al. 2008, 2010). William H. Dall of the U.S. Coast and Geodetic Survey conducted perhaps the earliest archaeological studies in the region. Between 1871 and 1874, he excavated shell heaps on Attu (Near Islands), Amchitka (Rat Islands), and Adak (Andreanof Islands), and through stratigraphic relationships of sea urchin remains he estimated that one cultural deposit on Amchitka dated to 2200 BP (Dall 1877:52).

From 1936 to 1938, Aleš Hrdlička of the USNM conducted archaeological field research across the Aleutian archipelago, including visits to Little Kiska, Kiska, and Amchitka. Based partly on this work, Hrdlička (1945:586) hypothesized that two physically distinct human populations occupied the islands after separate migration events: the first occurring in "the earlier part of the Christian era" and the other within the last "few hundred years." Based on different cranial shape and body size Hrdlička (1945:474) characterized the skeletal remains as "Pre-Aleut" and "Aleut," contending that these morphologically different populations possessed "the same classes of objects, though differ in form and other details." In general, Hrdlička (1945) hypothesized that the brachycephalic Aleuts (with more round heads) likely migrated from the Alaska Peninsula to interact and/or replace the dolichocephalic to mesocephalic Pre-Aleut people (with more narrow to intermediate shaped heads) about 1000 BP. His measurement of the postcranial bones suggested that the Pre-Aleuts were also both taller and more robust than the Aleuts. While Hrdlička (1945:212) self-characterized his archaeological excavations as "exploratory incisions," he maintained that a pattern of thick Pre-Aleut deposits were overlain by a thin layer of more recent Aleut deposits near the surface, though both physical types of remains were present in some areas, suggesting admixture. Physical anthropology studies investigating Hrdlička's Unangan population history theory, based on biological evidence collected from

recovered human skeletal remains, will be addressed separately in the Biological Population History section below.

During World War II, Paul Guggenheim, a Captain in the U.S. Army Air Force, was stationed on Amchitka Island for a ten month period in 1943-44. Guggenheim was an experienced archaeologist, having previously worked with Hrdlička during his 1937 Aleutian campaign. During his stay on Amchitka, Guggenheim excavated 40 sites,⁴ including village and camp middens (Guggenheim 1945:24). He could discern a prehistoric "pre-Aleut" and historic "post-Russian" occupation of the island and collected a wide variety of artifacts, including stone lamps, labrets, and glass trade beads as well as human remains (Guggenheim 1945:25-26).

William Laughlin began his academic career as a volunteer for Hrdlička during the 1938 Alaska field season and eventually became one of the most influential scholars researching in the Aleutian archipelago. Following World War II, excavations by Laughlin and Marsh (1951) in the eastern Aleutian Islands initially confirmed Hrdlička's two-stage migration theory, but subsequent evidence for continuous occupation of the Anangula Blade site for 8,700 years led him to consider that evolutionary forces acting over time on population isolates were the source for the two distinct cranial morphologies (Laughlin 1975, 1980). His alternative population history model will be discussed in the Biological Population History section below.

Between 1968 and 1971, an archaeological survey of Amchitka was conducted by teams associated with the U.S. Atomic Energy Commission (USAEC) (Cook et al. 1972; Desautels et al. 1971; Turner 1970).⁵ In summary, they documented more than 75 sites on the island. Turner and his team tested six sites on the eastern end of Amchitka. Several of these localities were previously visited by Guggenheim, but Turner also excavated two undisturbed "village or camp" middens dating to the Russian period. One of these, site 49 RAT 13, contained blue glass beads, iron objects, a quartzite labret, among other items (Turner 1970:123, 126). Turner also recovered the remains of at least six individuals, and he reported that the majority of midden sites on Amchitka had been despoiled by World War II military activity and artifact-hunting. Moreover, the detonation of World War II munitions in the summer of 1968 damaged at least two prehistoric sites.⁶

⁴ Guggenheim noted that many soldiers eventually "vandalized" the majority of these sites in their search for curios and artifacts, some of which Guggenheim purchased for his own "personal collection" (Guggenheim 1945:25, 31). It is not known how many objects comprised Guggenheim's personal collection or what percentage of it was donated to the USNM.

⁵ Three atomic tests were conducted on the island between 1965 and 1971.

⁶ In 1995, Mobley (1996) evaluated the potential risks and hazards of World War II features and materials on Kiska and Little Kiska Island. In 1985, these military features were recognized as National Historic Landmarks and are currently managed by the National Park Service.

Turner, basing his argument on the observed midden accumulation rate at one Amchitka site (49 RAT 14), concluded that "somewhat more than 2000 years, possibly 2500, of Aleut occupation are needed to account for the existing and probable midden depth of at least one of its numerous sites. Most [Amchitka] sites, however, are probably considerably younger than the oldest. Some may be older" (Turner 1970:126).

Between 1985 and 1990, the Bureau of Indian Affairs (BIA) conducted archaeological studies of sites in the western Aleutians, including 95 in the Rat Islands (USBIA 1986, 1990). These investigations were undertaken to document site locations of historical significance as part of the Alaska Native Claims Settlement Act (ANCSA). Nine radiocarbon dates from four "blowout"⁷ sites on Amchitka clustered between 4700 and 4300 BP (Corbett et al. 2008:47, Corbett et al. 2010:20), suggesting an early occupation date in the Rat Islands.

In 1991, the Western Aleutian Archaeological and Paleobiological Project (WAAPP) initiated additional survey and excavation work in the Rat Islands and Near Islands to help identify prehistoric village organization patterns. This research, which is currently ongoing, revealed that the earliest settlement pattern in the Rat Islands consisted of small coastal villages comprised of eight or so houses probably occupied by small groups of related families (Corbett et al. 2001:264). Settlement patterns in the Near Islands resembled those found in the Rat Islands, but village sizes were slightly larger. However, additional data collected by the WAAPP revealed that the occupation of the Near Islands occurred some 1200 years after the Aleut began populating the Rat Islands, with Aleuts arriving on Shemya in the Near Islands around 3200 years ago (Balter 2012:160; Corbett et al. 2008:47; Corbett et al. 2010).

Recent studies indicate that climate apparently played an important role in Aleut migrations to the western Aleutians. Radiocarbon dates indicate Aleuts were living on Anangula Island in the eastern Aleutians 9000 years ago, arriving in the central Aleutians approximately 3000 years later (Balter 2012; Davis and Knecht 2010). More specifically, Savinetsky et al. (2012) examined diatoms from a peat bog on Adak Island and determined that Aleuts first colonized the central Aleutian Islands approximately 6000 BP during the coldest period of the Holocene in the Bering Sea. At this time, the central Aleutians could be characterized by a particularly inhospitable environment dominated by high seas and increased cyclonic activity. Around 4000 years ago, however, the Aleutian climate changed. Peat bog analyses on Shemya Island revealed a cool but drier climate than today with decreased cyclonic activity and calmer seas (Savinetsky et al. 2010). This climatic change probably enabled long-distance voyages

⁷ A blowout site is a depression or concavity in the earth formed by wind action or erosion of sandy or soft, light soils. In the Western Aleutian Islands, they are further characterized by "small scatters of lithic flakes and cobble tools appearing on high bluffs away from the shoreline at deflated 'holes' in the tundra vegetation" (Corbett et al. 2010:200).

through interisland passages, resulting in the colonization of the far western Near Islands from points east.

Biological Population History

As discussed above, Hrdlička (1945) maintained that the original occupants of the Aleutian Islands, who he called Pre-Aleuts, experienced an in-migration of new people around 1000 BP who he simply called Aleuts. These two hypothesized groups of people were based on cranial shape and postcranial body size differences, and have respectively come to be referred as Paleo- and Neo-Aleuts in the anthropology literature. Both cranial shapes are found in several of the archaeological sites addressed in this case report. Therefore it is important to determine whether individuals with these hypothesized cranial types possess significantly different biological trait profiles, potentially indicating distinct groups that may or may not have a descent relationship to living peoples, and thus contribute to the overall determination of cultural affiliation.

Laughlin and Marsh's (1951) work in the eastern Aleutian Islands initially confirmed the migration theories proposed by Hrdlička. They renamed the two perceived groups "Paleo-Aleut" and "Neo-Aleut," equivalent respectively to Hrdlička's Pre-Aleut and Aleut (Laughlin and Marsh 1951:98). These terms are now widely used in the academic literature when discussing prehistoric Unangan migration hypotheses and will be used for convenience in this discussion. With further archaeological investigation Laughlin (1963) maintained that the observed physical dichotomy of the Paleo- and Neo-Aleut head shape resulted from *in situ* evolutionary processes due to the extreme isolation of the Western Aleutian Islands. Using data derived from archaeological crania and living peoples, Laughlin (1963, 1980) posited that natural selection produced the brachycephalic type in the larger populations of the eastern Aleutian Islands, and that through genetic drift this cranial type spread to the less populated western islands, producing a substantial east-west distribution, thus explaining the retention of dolichocephaly in the western Aleutians. By the 1980's most researchers had accepted that the transition from a dolicho- and mesiocephalic Paleo-Aleut to a brachycephalic Neo-Aleut population was merely one example of a global trend in cranial morphology, and population replacement had not occurred (Coltrain et al. 2006:537). Laughlin's data sources included the cephalic index from living peoples and the cranial index from skeletal remains. However, Laughlin did not measure any skeletal remains from the western Aleutian Islands of the archipelago and he acknowledged that no statistically significant difference was present between the groups (Ousley and Jones 2010).

Turner (1991:14) investigated dental trait variation across Alaskan Native groups, including 80 Unangans from the western Aleutian Islands, 29 from eastern Aleutian Islands, and 42 from Umnak Island which he considered an intermediate or "central" location. His results showed that prehistoric and living western Unangans generally have smaller teeth than eastern

Unangans and display some dental trait frequency differences, a finding he attributed to the evolutionary mechanisms of genetic drift and founder effect on island populations. Due to small sample sizes available, Turner's (1991) dental analysis of Paleo- (n=23) and Neo-Aleut (n=37) cranial types pooled the individuals across all islands. No statistically significant differences were found between dental traits by cranial type, nor between these types and living Unangans. While Ousley and Jones (2010:636) are critical of Turner's use of a calculated cranial index to sort individuals into one of the hypothesized cranial types, they acknowledge that Hrdlička did not have, "hard and fast rules" for his classifications in the first place. They also point out that Turner's use of univariate statistical tests have less power to detect differences, but it should be noted that these same tests did reveal significant differences in east-west dental trait and size comparisons. While Turner (1991:175) was unwilling to draw "firm conclusions" given the small sample sizes, he maintained that three interpretations were possible for his results:

- 1) There is no evidence for external migration, both Paleo- and Neo-Aleut genes coding for dentition are drawn from the same population.
- 2) Cranial types are not biologically real but are artificial classes.
- 3) The pooling of east and west Paleo- and Neo-Aleut dentitions has obliterated any differences.

Turner (1991:173) considered interpretations 2 and 3 to be "unreasonable" given that eastern and western dental trait and size differences were found to exist, but concluded that these dental differences must not be correlated with cranial type.

Radiocarbon dating of eastern Aleutian skeletal remains that fall into the categories of Paleo- and Neo-Aleut by Coltrain et al. (2006:544) revealed that all remains dating older than 1000 BP were classified as Paleo-Aleut, and that after this point "Paleo- and Neo-Aleut people were fully contemporary" and coexisted on Kagamil Island, Ship Rock Island, and Umnak Island. Dietary isotopic analysis suggested to Coltrain et al. (2006) that Neo-Aleuts were more reliant on offshore marine mammals, while Paleo-Aleuts (both pre- and post-1000 BP) relied more on near-shore resources. While the dietary isotopic results are reported as statistically significant, the relative differences are small, calling into serious question these foraging strategy conclusions; the mean $\delta^{13}\text{C}$ for the Neo-Aleut group is higher by 0.3 ± 0.5 and $\delta^{15}\text{N}$ is higher by 1.0 ± 0.8 (Coltrain et al. 2006). The objective opinion of dietary isotope experts is that these reported differences are too small to draw any meaningful foraging strategy conclusions from archaeologically recovered remains (Tosha Dupras and Tamara Varney, personal communication, March 12, 2015).

Coltrain et al. (2006) also maintained that Paleo-Aleuts buried their dead in subsurface interments and appear to have continued this mortuary custom after Neo-Aleuts introduced mummification and cave or rock shelter burials. The perceived differences in foraging strategy and burial practices suggested to these authors that individuals with Paleo-Aleut and Neo-Aleut cranial morphology maintained separate group identities after contact. Moreover, with the

hypothesized influx of more socially complex Neo-Aleut populations after 1000 BP "significant social disparities" may have existed between them and the coexisting Paleo-Aleuts, but these differences were largely subsumed during the social and cultural upheavals following Russian contact (Coltrain et al. 2006:545). A more recent study by Coltrain (2010) reveals that individuals with Paleo-Aleut cranial morphology were also interred in burial caves at Kagamil and Ship Rock Island in the central Aleutians. Moreover, at least two individuals with Neo-Aleut cranial morphology were buried in a midden deposit at the Chaluka site on Umnak Island, suggesting to Coltrain that the intra-site distribution of Aleut burial patterns is more complex than previously thought (Coltrain 2010:392). It should also be noted that many formerly inhabited Aleutian Islands do not contain caves or rock shelters, and this geological fact perhaps compelled people to inter their dead in the ground. In addition, as will be discussed below, mummification is only one part of an overall mortuary behavior that may have been conducted for cultural reasons. Thus, mummification may not be indicative of biological differences or an indicator of social inequality between or within populations (Frohlich and Laughlin 2002).

Recent genetic and morphological studies support an overall Alaska Peninsula origin for all Aleutian peoples (Raff et al. 2010; Raghavan et al. 2014), but also seemingly sustain Hrdlička's scenario of a second wave of migration occurring across the Aleutian Islands from this eastern location. Smith et al. (2009) conducted ancient DNA (aDNA) analysis on the same eastern Aleutian Island individuals studied by Coltrain et al. (2006). Their mitochondrial DNA study (or mtDNA, genetic material inherited only from the mother and passed on to her children) found that the earliest individuals with Hrdlička's Paleo-Aleut cranial morphology were characterized by a high Haplogroup A2 frequency, while those with Neo-Aleut cranial shape had a lower frequency of Haplogroup A2 and a correspondingly high frequency of Haplogroup D2, a pattern more similar to that found in living Unangan people. These genetic differences were statistically significant, were estimated to have occurred approximately 1000 years BP, and were considered to be consistent with a population history involving migration, expansion, and amalgamation by genetically related peoples given that both haplotypes were present before and after the hypothesized migration event. Raff et al. (2010) found the same mtDNA haplogroups A2 and D2 (as well as B2, D1 and D3) in archaeological sites on the Alaska Peninsula and concluded that migration into the eastern Aleutian Islands likely occurred from that region. Raghavan et al. (2014) also studied mtDNA from archaeological contexts across Alaska and rejected the possibility of a west to east population movement along the Aleutian archipelago from Asia.

Crawford et al. (2010) attempted to use Y-chromosome haplogroup frequencies (nuclear DNA inherited only from the father and passed on to the son) to discern Unangan genetic structure prior to Russian contact. However, it was concluded that any pattern in the sampled data had been obscured by the waves of European men who colonized the Aleutian region, starting with the Russians in the eighteenth century. Therefore, the current limited coverage of

the aDNA results to the eastern side of the Aleutian archipelago, and the fact that only maternally inherited DNA has been studied, must be considered as limitations on deciphering a potentially complex Unangan population history.

Ousley and Jones (2010) conducted a non-destructive, multivariate craniometric study of all archaeologically recovered Aleutian remains in the physical collections of the NMNH, Smithsonian Institution, in order to re-evaluate the Hrdlička and Laughlin studies; to compare and contrast more recent radiocarbon, dietary isotope, and ancient DNA evidence; and to attempt to provide further insight into Unangan population history. They discovered that there was no significant correlation of Laughlin's data with longitude, thus disproving any east-west clinal distribution of the cranial types. Their analysis further revealed that there was no relationship between the craniometric data and the Unangan ancient mtDNA haplogroup results, suggesting that the genetic frequency changes observed over time were independent of cranial shape. They concluded that the Pre-Aleut and Aleut groups identified by Hrdlička, or what are today identified as Paleo- and Neo-Aleut groups, probably do not represent genetically distinct peoples, and that secular change due to altered developmental environment, such as dietary shifts and other sociocultural variables, may account for variability in cranial morphology.

Statistical analysis of the major post-cranial long bone lengths and robusticity indices of archaeologically recovered Paleo- and Neo-Aleut individuals by Hrdlička was conducted by the Repatriation Osteology Lab for this report (see Appendix A). This analysis revealed that there is no statistically significant difference between male or female Paleo- or Neo-Aleut individuals. There is a trend for individuals with a Paleo-Aleut head shape to have slightly longer bone lengths; however, the Paleo-Aleut male bones are on average only 2 mm longer (mean bone range difference of -1.2 mm to 3.7 mm), and Paleo-Aleut female bones are on average only 7 mm longer (mean bone range difference 2.9 mm to 11.2 mm). The bone-by-bone length and robusticity distributions, as Hrdlička would have observed, completely overlap and are not statistically different, and therefore are not evidence of biologically distinct peoples. However, it is noted that overall Neo-Aleut bone statistics display a trend towards increasing variance (possess a wider metric distribution), perhaps suggesting an amalgamation of two or more groups of people, which is consistent with the ancient DNA findings, or perhaps resulting from changing environmental conditions as described earlier.

When the overall skeletal observations contained in the various Aleutian islands research studies are put into context of other physical anthropology research, it is apparent that while growth and development of the human skull and body have a genetic component, it is very dependent on environmental variables. The plasticity of cranial morphological shape was observed very early by Franz Boas (1912:5) while studying European immigrants to the United States and their North American born offspring:

These [cranial metric] results are so definite that, while heretofore we had the right to assume that human types are stable, all the evidence is in favor of a great plasticity of human types, and permanence of types in new surroundings appears rather as an exception than as a rule.

Martínez-Abadías et al. (2009) studied the cranial dimensions of 355 adult skulls with documented family trees from Hallstatt, Austria, and found that the human skull possesses complex patterns of genetic correlation. The phenotypic shape and genetic patterns of correlation are consistent but do not support hypotheses that cranial type, such as dolichocephaly and brachycephaly (as used by Hrdlička, Laughlin, and Turner to assign Paleo- and Neo-Aleut type), is grounded at the genetic level. They caution that "Phenotypic data [such as cranial shapes] may introduce a potential bias in population and quantitative genetic studies unless the sample size is sufficiently large or familial information is available" (Martínez-Abadías et al. 2009:29). Perez et al. (2009) compared craniometric data and mtDNA haplogroups from human remains dated to 8000 to 400 years BP from Argentina. They found that the oldest individuals, with cranial shape typical of other Paleoamericans, present the same mtDNA haplogroups as later individuals with cranial shape typical of Amerindians. They maintain that local craniofacial differentiation could result from evolutionary forces, such as genetic drift, selection, and plasticity in response to the environment.

The current ancient DNA studies and archaeological evidence of cultural continuity indicate that if an additional migration event occurred approximately 1000 BP across the Aleutian archipelago, it likely involved the merging of earlier inhabitants with the in-migrating group, rather than a replacement of earlier peoples. In fact, Hrdlička (1945:551) recognized that immigration does not necessarily result in replacement, but that mixing of people occurred in a predictable fashion as a result of "localized and limited invasions followed by local multiplication and further extension." Coltrain (et al. 2006) conducted radiocarbon dating and found individuals with the Paleo-Aleut head shape both before and after the hypothesized second migration, but prior to European contact. Smith et al. (2009) conducted aDNA analysis on the same individuals studied by Coltrain et al. (2006) and found the same mtDNA haplotypes A2 and D2 present in Paleo-, Neo-, and living Unangans, but at different frequencies. While the isotope and aDNA studies were confined to individuals archaeologically recovered from the eastern Aleutian Islands, other craniometric, dental traits, and material culture research involved individuals from other sites from the western Aleutian Islands.

Therefore, the known biological data collected from skeletal remains archaeologically recovered from the Aleutian Islands does not support an interpretation of a biologically discrete difference between earlier occupants of the Aleutian Islands (Paleo-Aleuts in the anthropology literature) and later peoples (Neo-Aleuts). When the aDNA results are compared to modern Unangan people the same mtDNA haplotypes are present in archaeologically recovered

individuals as those seen in living peoples, although not surprisingly the frequencies change over time. These results are consistent with an ancestor-descent relationship.

Contact Period

During the early contact period of the mid- to late eighteenth century, Russian explorers and traders occasionally visited the inhabited settlements of the Rat Islands group. At that time, the historically documented Qaġun tribal communities were located on Amchitka, Semisopchnoi, Buldir, and Kiska Island (Black 1984:52-55; Masterson and Brower 1947:133-135).

Although there are only a very few historical records concerning these interactions, perhaps the earliest two accounts were logged in brief passages dating to 1757 and 1758. The first was recorded by two Russian "tribute" collectors who visited the Near Islands. On the island of Attu, they met with the *toyon* or "chief," and through a translator he said that "Eastward there are three large and well peopled islands, Ibiya [Buldir], Kicksa [Kiska], and Olas [?], whose inhabitants speak a different language," from the Attuans (Coxe 1780:46). The following year the shipwreck of the vessel *Sv. Kapiton* was reported off the coast of Kiska. Survivors were attacked by local Qaġun Aleuts in kayaks, but they fended off the advance and eventually built a makeshift vessel with which they returned to a Russian outpost in the Near Islands (Black 1984:186).

The most detailed account of the region and its inhabitants was provided by the Russian sailor Prokopii Lisenkov ca. 1761, who visited the Rat Islands and described, among other things, the material culture and language of the Buldir and Amchitkan people, which was unlike that spoken by the Aleut people to the west (Near Islands) and east (Andreanof Islands) (Black 1984). He characterized these people as shamanistic and war-like, and reported that some men owned iron-tipped knives and wore bentwood hunting visors adorned with human figurines and sea lion whiskers. Women and men wore facial labrets and body tattoos, and their nasal septa were pierced with bones. In the winter, local residents lived in semi-subterranean houses but in summertime people inhabited caves. Local leaders were called "toion" (*toyon*) and they were supported by "subordinates" (Divin 1979:345-347 in Black 1984:53-55). Lisenkov also described the maritime subsistence practices of the Qaġun Aleut: "The folk on these islands is rather numerous, they use for food animal and sea otter meat, also sea lions and drift whales, as well as sea fish: halibut and cod. Mostly, they eat it raw, but also they cook [their food] sometimes. Instead of kettles, they cook on stone slabs smeared around the edges with clay" (Black 1984:53).

The next significant description of the Qaġun Aleut was provided in the short travel journal of Russian seaman Dmitri Bragin ca. 1777 (Masterson and Brower 1947:127-135). Sailing east to west from the island of Tanaga in the Andreanof Islands, Bragin noted that the

"Island of the Seven Mountains" (Semisopochnoi) contained a population of some 25 families, "whose language differs somewhat from that of the neighboring [Andreanof] islanders. Men and women wear clothes of birds' bellies or skins of young sea bears [fur seals], tattoo their faces with needles, and insert bone rods as much as a span long into the perforated cartilage of their noses and into openings in the lower lips" (Masterson and Brower 1947:134).

From Semisopochnoi, Bragin crossed a strait to "Amchigda" (Amchitka). Here, some 30 families made their homes and the Russian mariner noted that they resembled the inhabitants of Semisopochnoi "in speech and customs" (Masterson and Brower 1947:134). Afterwards, Bragin passed by Little Sitkin, another island in the Rat archipelago, but he observed that this volcanically active isle did not support any residents (Masterson and Brower 1947:134).

Bragin apparently wintered on one of the habitable islands in the Rat Islands group and recorded additional ethnographic details about the Qaxun Aleut people (some of his comments will appear in a later report section, "Religious Life"). He wrote: "Each has as many wives as he can support. They yield little obedience to their toyons or leaders, but they show no little reverence toward the elders. In general they are...of quick understanding and excellent memory" (Masterson and Brower 1947:134-135).

The Russian navigator Vasil'ev visited and described the Rat Islands and its peoples during an 1811-1812 voyage. He stated that about seven years before his trip, the "entire population of the Rat Islands Chain," consisting of 85 persons⁸ moved to Atka in the Andreanof Islands for two possible reasons. The first was to "rest" the islands in respect to the taking of animals and the second motivation was said to have been related to Russian interests in acquiring more workers for the harbor at Atka (Black 1984:158). Vasil'ev recorded other local events:

Many of them died [at Atka], from hunger or from various diseases.

As I was preparing for my departure, their taion [toyon]...and others from among the resettled convincingly pleaded that I take them back to Amchitka. [Eventually] I carried to Amchitka 38 persons, males and females, with their children...I had the pleasure of landing these islanders in their home on 5th of May [1812], at the harbor which they themselves indicated. They assure me that this is the best location in the entire island. This Amchitka location is at latitude 51°26'N and longitude 179°32'E. by Greenwich, compass variation 51 ½°E.

How great was the joy of the Aleuts! They wanted to immediately fix up their baidarkas [kayaks] and set out on the hunt and also to look for their

⁸ This number is thought to only represent adults (Black 1984:158).

compatriates who left Amchitka for Kiska in 6 baidarkas; that is, the entire population of the Rat Chain. We spotted two habitations [on Amchitka]. In one there were two old women, two young women, in the other an old man, toion Usacha[x], who was barely able to move about, and with him a young son, a minor, and four old women. I counselled them to move to [Amchitka] harbor, promising that next year a ship would come looking for them there [Black 1984:158].

The last substantive description of the Qax̂un was recorded by the Russian Orthodox priest Iakov Netsvetov in 1830. Netsvetov, who was of Unangan descent, was the first Christian priest to work in the central and western Aleutians, 1829-1844 (Black 1980:xv).⁹ During a six-day visit to Amchitka, Netsvetov held mass, baptized dozens of local residents, and performed marriage ceremonies "for 1 Russian and 10 Aleuts" (Black 1980:31). Netsvetov listed the local Qax̂un Aleut population on Amchitka at approximately 55 individuals. He noted that the language of these people differed from the Atkans, as did their hunting and life-styles. They were governed by a *toyon*, who maintained authority over the population and the hunt. Local people lived in semi-subterranean houses or "baraboras, apart from the settlement in a dispersed [pattern]" (Black 1980:31).

Netsvetov set sail from Amchitka on May 1, 1830. En route to the Near Islands, he noted that Buldir Island, the last island in the Rat group, contained no permanent inhabitants but sometimes hosted seasonal Aleut visitors who hunted sea otters for the Russians (Black 1980: 32).

Oral historical traditions recorded at Atka in the twentieth century document that the Rat Islanders were brought eastward by Russians in the early nineteenth century to be resettled on Adak Island and Atka Island in the Andreanof chain (Bergsland 1959). Whether this movement was the result of devastating diseases brought by the Russians, forced migration to large Russian trading posts where indigenous peoples could be controlled, poor subsistence conditions, or Russian-Aleut or intertribal warfare is not known (Black 1984:96; Stein 1977:154). However, the Atkan elder William Derks remembered that the Qax̂un Aleut resettled in their own village at Atka and were buried by an avalanche, killing them all (Bergsland 1959:14). The Qax̂un residing in Adak were later brought to Atka "where the descendants of the tribe are said to have still been living at the beginning of this [the twentieth] century" (Bergsland 1959:14).

Other sources dispute aspects of the Qax̂un Aleut migration to islands in the Andreanof archipelago. William Healy Dall of the U.S. Coast and Geodetic Survey excavated on Kiska and Amchitka Islands in 1873. In his published report, he noted the existence on Kiska of a "modern village-site at the west end of the harbor, and one, quite extensive, on the bay on the west side of

⁹ Netsvetov's successor, the Russian priest and later bishop Ioann Veniaminov, utilized many of Netsvetov's ethnographic observations in his published works (e.g., Veniaminov 1984 [1840]).

the island, opposite the harbor" (Dall 1877:44). On Amchitka, he observed "numerous large village-sites on the north shores of the island, west to Kirilloff settlement, the latter being quite modern, and abandoned in 1849" (Dall 1877:44).

U.S. Census records from the nineteenth century do not record settlements in the Rat Islands. However, they do record population statistics for Atka as well as subsistence usage of the Rat Island archipelago by Atka hunters, among other details. According to U.S. Census agent Ivan Petroff, the settlement of Atka consisted of 235 individuals, and was "now the only location occupied by these people, where heretofore, coming from Atooi [or Attu Island in the far west], many settlements existed on the different islands and islets" (U.S. Census Office 1881:16). For the 1890 census, Census Superintendent Robert Porter noted that the people of Atka occasionally traveled to the Rat Islands for subsistence purposes. More specifically, he wrote that the "Atka natives, for the past 2 years, have hunted principally around Kyska [Kiska] island," and "the numerous islands between Atka and Attu are each visited in turn by the [Atka] hunters about once in 3 years" (U.S. Census Office 1893:82, 209).

After 1848, it is known that a Russian Orthodox chapel was built on Amchitka near Constantine Harbor (Black 1984:192). Smithsonian anthropologist Aleš Hrdlička (1939:82) noted the presence of this chapel during his 1938 fieldwork on Amchitka, writing: "[W]e were put off in Constantine Harbor, where there are a couple of small houses recently constructed by the Bureau of Fisheries and four native trapper dwellings, with an attractive little native church. There are no inhabitants on the island in summer." This chapel with its adjacent cemetery were used by seasonal Aleut trappers during short periods in the winter months (Veltre 2013:392). In all likelihood, the Aleut trappers documented in these records were from Atka, since it has been recorded that Atkans conducted kayak trips and trapping expeditions to the Rat Islands in the eighteenth and twentieth century (Bergslund 1959:17; U.S. Census Office 1893:82, 90).

Ralph Prokpeof, an Aleut hunter working with the Alaska Fisheries Department, stated in the late 1960s that semi-subterranean barabaras continued to be used by trappers on Amchitka Island through the 1930s. These structures "were built along the fox trap lines and were used by the trappers as shelters during storms, and as temporary camps" (Desautels et al. 1971:26). During World War II, Paul Guggenheim reported the existence of several "habitable barabaras" on Amchitka, including one "in which some enlisted men were living" (Guggenheim 1945:24).

United States Atomic Energy Commission (USAEC) archaeologists working on Amchitka between 1968 and 1971 noted that a historic Aleut cemetery was still visible. Situated on a low bluff overlooking Constantine Harbor, Turner wrote:

The graveyard, an area approximately 20 x 30 m outlined by rotting wooden stakes, contains three evident graves. One marked with an engraved stone cross rather than of wood belongs to 'Anna Zoachney,

1894-1930.' Its close proximity to a lichen-capped wood grave-marker suggests some relation between the two [Turner 1970:124].

Turner also reported that military activity in the 1940s "destroyed completely the Aleut houses and church that were in use up until that time" (Turner 1970:1212). However, he did note the existence of several Aleut trapper's barabaras on Amchitka.

A few years later, other USAEC archaeologists described the cemetery site:

The remains of several markers are still in evidence; the cemetery has been fenced since 1968. One headstone bears the name "Anna Zeochney [sic], 1884-1930." The other graves are typical of historical burials with small wooden fences and carved wooden corner posts. The crosses which are surmounted by orbs, are typical of the three-barred Russian Orthodox style [Desautels et al. 1971:24].

The surname Zaochney can be traced to the Native Village of Atka. Alan May, one of Hrdlička's field assistants during the 1938 Amchitka expedition, wrote in an unpublished manuscript that a former field guide "Makari Zoachney [sic] of Atka" had disappeared on Amchitka while trapping in 1937 (Veltre 2013:371).

Warfare and Military Leadership

Prior to and after Russian contact in the eighteenth century, many Unangan groups fought one another. The Russian Orthodox priest Veniaminov (1984 [1840]:203, 206) provides numerous examples of conflicts across the Aleutian Archipelago and wrote that wars were waged over subsistence grounds, sites of natural resource extraction (i.e., furs, minerals for trade, etc.), women, vengeance, glory, profit, and "sport." Weaponry consisted of bows and arrows (sometimes poisoned), spears and darts launched with throwing boards (atlatls), knives or daggers, as well as other military equipment, including woven armor and wooden shields (Veniaminov 1984 [1840]:210). Coxe (1780:170) also mentions the use of "bows and arrows pointed with flints" in his overview of early Russian sources on the Aleut.

Writing of the Qaxun Aleut inhabiting Buldir Island, Lisenkov described the armaments of this people about 1760:

[They are] very ferocious and unfriendly. When it is necessary to land for water, they attack suddenly and do not permit one on shore... These peoples have long arrows which they throw by means of a board [atlatl]. On the arrows they use whale bone or a sharp stone... By means of shamanism they send rain during attacks by enemies [Black 1984:53].

Lisenkov's general remarks concerning the inhabitants of the Rat Islands contained other details about the military gear and tactics of these people:

These people have weapons for military action, arrows which are thrown from the throwing boards [atlatls], and they also shoot with bows arrows which are about [a] half-arshin long [~35cm], fletched, and cast stones by means of thong slings. They each carry two knives at their collars, in sheaths made of sea otter tails; some have points [on their weapons] of iron. Iron is obtained from the wrecked Japanese vessels, because these are cast out here and the nails are not like Russian ones, but wider and longer; they also use iron from wrecked Russian vessels.

When a vessel chances to pass close by these islands, these people approach in baidaras [sic] and pretend to invite in friendly manner, pointing out a likely harbor. They see iron on the vessels, and this is why they incite [us] to come. They leave their baidarkas [kayaks] and board the vessels, like friends, and count how many people the Russians have on board. Once one comes to shore, they attack strongly, so that one is barely able to escape safely [Black 1984:53].

Among the Unangan, military expeditions "were always" led by lineage chiefs (*toyon* or *toion*) or their sons or nephews, and these individuals held sway over their followers because they were "famous for bravery, military skill, knowledge of the enemy's territory, and quickness of mind and ability to command" (Veniaminov 1984 [1840]:206). Under the military leader, four to eight inveterate warriors were selected to command the detachments while also serving as the commander-in-chief's "council of war" (Veniaminov 1984 [1840]:206).

Battles rarely took place at sea. Instead, a military expedition would set out in one or more kayaks or baidaras (large skin boats) toward their destination. As they drew near the enemy village, they moved only at night but preferred to attack and fight in the daytime, especially at dawn, as that was considered "more glorious" (Veniaminov 1984 [1840]:207). Veniaminov wrote:

Having stolen up as close as possible, suddenly with the cry, "Strike! We conquered!," and sometimes to the beat of drums, the attackers fell upon their sleepy enemies. And if in a single assault they were successful in taking the village, which, with such a way of making war, almost always occurred, then they killed the very old men and women without any mercy and took the young of both sexes prisoner. At the finish of the battle they presented them to the leader...

Prisoners, according to the rules of war, belonged only to those who had proven themselves, indeed, fearless in battle and real conquerors. But these, out of vanity, right away gave away [their captives] as slaves to those who, by the rules of war, could not obtain prisoners [Veniaminov 1984 [1840]:207-208].

Oftentimes, war captives included women who became the slaves or concubines of their conquerors. Black (2004:149) noted that they were undoubtedly "transmitters of cultural traits from one group to another [since in] all probability it was the women who transmitted folktales about wars to their children."

Veniaminov (1984 [1840]:179) briefly described that the Rat Islanders were nearly decimated by the advances of the Atkans, because the Qaxun were "their weakest neighbors." However, Veniaminov also wrote that the Atkans believed the Qaxun were a related people:

The Atkha Aleuts, or the inhabitants of the Andreanov, Rat and Bering Islands, which lie between the Unalashka District and Kamchatka, belong to the same stem [tribe] and are of the same origin... The evidence for this [assertion] is found in their language, character, and very physical appearance.

The Atkhans themselves believed that all inhabitants of all the islands of which they were aware were descendants of a human pair which came down from the sky on one of the islands, called TANAK [Tanaĥ], located within their own island group [the Andreanofs] [Black 1984:171].

Religious Life

Before the arrival of resident Russian Orthodox missionary priests in the early nineteenth century, devout Russian Orthodox traders, explorers, and merchants began baptizing Unangan peoples as early as the eighteenth century (Theophilus [Pashkovsky] 1934:29). In the pre-Russian Aleut tradition, however, the religious practices of the Unangan were animistic and various deities and spirits (e.g., ancestral, animal, environmental) were beseeched and propitiated to ensure good hunting and to assuage the advances of malevolent supernatural entities believed to be the harbingers of sickness, disease, and misfortune (Marsh 1954).

Although knowledge of Aleut religious practices is fragmentary, Unangan religious ceremonies were conducted by shamans (*quga-gi-x*, "one having spirits") who could either be male or female (Berreman 2002:40). These influential individuals possessed powerful personas and were highly respected in their home communities for their abilities in curing, pharmacopeia, prognostication, leadership, storytelling, drumming, singing, and dancing, among other things.

As previously noted, early observations of Qaxun Aleut religious life were recorded by Russian visitors. Around 1775, Bragin described the shamanic traditions of the Qaxun:

In all the [Rat] islands enumerated above we found no trace of religion among the inhabitants except that certain sorcerers practice their wizards' tricks among them and wish to foretell things to come, which sometimes, indeed, bear them out. In December and January they foregather for great festivals, at which they put on their best clothes of bird skins or furs, don suitable masks, sing, beat hand-drums, and sing merry songs [Masterson and Brower 1947:134].

Basing his report on early Russian sources, the eighteenth-century English historian William Coxe wrote that Aleut shamans, like those of the Qaxun, were typically masked during their performances:

[T]hey have fortune-tellers employed by them at their festivals. These persons pretend to foretell events by the information of the Kugans or Daemons. In their divinations they put on wooden masks, made in the form in which they say the Kugan appeared to them; then they dance with violent motions, beating at the same time drums covered with fish skins. The inhabitants also wear little figures on their caps, and place others round their huts, to keep off the devils [Coxe 1780:261].

Elsewhere, Coxe (1780:172) mentions that such wooden masks represent "various sea-animals" and are "painted red, green, or black, with coarse coloured earths found upon these islands." He added that once the ceremonies had concluded, "masks and drums are broken to pieces, or deposited in caverns among the rocks, and never afterwards made use of" (Coxe 1780:172).

Explorer Martin Sauer (1802:160, 272) observed that carved masks on Unalaska were deposited in a cave and noted that the local priest "went and burnt them all ... [But] they still observe their annual dance in masks, and with painted faces; the masks are called *kugahs*." A few years later, Russian naturalist Langsdorff (1814:49) commented that the "masks, which earlier travelers observed these [Unalaska] people to wear at their festivals, seem now entirely given up."

With respect to the Unangan of Atka and Unalaska Island, Veniaminov (1984 [1840]) provided a more detailed account on the subject of Aleut shamanism. It should be noted that this information was largely borrowed from the first resident Christian Orthodox priest to serve in the Atka district, the Creole Father Iakov Netsvetov, and did not derive from Veniaminov himself (Black 1980).

[They] had a shamanistic faith, that is, while acknowledging the Creator of the universe, they also believed in spirits who ruled the world.

It was the business of the shamans to call the spirits and to indicate which should be venerated more than others and called upon for aid.

The lore of spirits among the Atkhans was extensive. They believed in birds, fish and other living things; and in the sun, the sky, and other inanimate beings, thinking that spirits dwelt in them. As it was believed that only shamans were capable of communicating with the spirits, they represented such spirits in any way they knew how or wanted to, in the form of masks or false faces which they used in their shamanistic séances and spectacles. Such masks or faces the writer himself still saw [and] as a rule, they are hideous and depict some animal in a distorted form [of transformation?]....

The Atkhans also believed that the souls of those who died did not cease to exist upon quitting the body but lived on, wandering everywhere without a permanent abode.

The shamans among the Atkhans were men, and only rarely women...[The shamans] could foretell the future, and threatened with various punishments those who did not obey; they aided the sick and the hunters, etc. Therefore, the more skillful among them enjoyed great respect...

The ordinary occupations of the shamans were to make false masks or false faces and ... to arrange and conduct ceremonial feasts; to compose songs, and so on. All these activities were each conducted in a special place, which was safe from all contamination and impurity... [Veniaminov 1984 (1840):365-367].

As noted, Aleut women rarely acted as shamans and according to early pictorial and published works of the eighteenth century they also participated in ceremonial feasts as singers and dancers (Berreman 2002:37, Fig.3; Black 1980:101; Coxe 1780:171).

Unangan Mortuary Practices of the Early Historic Period

In the ethnographic record, there are no accounts of Qax̄un mortuary practices. However, several published sources do contain information on the funerary customs of neighboring Atka Islanders.

The earliest recorded observations of mortuary practices in the Aleutian Archipelago were made in the late eighteenth century by Russian observers. Hrdlička (1945:178-194) compiled these observations and began his account with descriptions of inhumations recorded during the late eighteenth century. One of the most important of these accounts details Coxe's

observations in the Fox Islands, and it probably pertains to burials on Unalaska Island and/or Umnak Island:

With respect to their ceremonies of burying the dead, they are as follows: The bodies of poor people are wrapped up in their own clothes, or in mats; then laid in a grave, and covered with earth. The bodies of the rich are put, together with their clothes and arms, in a small boat of the wood driven ashore by the sea: this boat is hung upon poles placed cross-ways; and the body is thus left to rot in the open air [Coxe 1780:173].

The Russian navigator and Admiral Gavriil Sarychev's (1806:77-78) account focusing on Unalaska Island is more detailed. Regarding the burial of chiefs (*toyon* or *toŷon*) and mummification, Sarychev wrote:

I had no opportunity of witnessing a burial; but I learnt from the inhabitants that a custom formerly prevailed at the decease of a Toja [*toyon*], or any other man of consequence, of burying one of his servants with him. But now this... custom is done away with; and the baidars, darts, and other utensils only of the deceased are put into his grave. The entrails are taken out of the corpse, which is stuffed with hay. Persons in mean circumstances are put without any ceremony into the ground, or into the cavities of rocks, but the rich are laid in tombs made of wood expressly for the purpose. Into these earth is first shaken, and then covered with grass mats and skins, upon which the body is laid, bound with thongs in the position in which one usually sits in the baidar, with the feet approaching towards the chest, and the hands folded round the latter [i.e., flexed burial]. Another mat is then laid over the body, and is covered with another layer of earth, upon which broken pieces of the baidar are placed ...But the bodies of little children, for whom such a frame can be made firmer and closer [are placed in a coffin]. Such coffins are decorated by the mothers with enamel beads, thongs, and birds' bills, and hung over their beds [Sarychev 1806:77-78].

Sauer (1802:161) also recorded local traditions of mummification with men "buried in their best attire, in a sitting position, in a strong box, with their darts and implements; and [they] decorate the tomb with various colored mats, embroidery, and paintings."

The German-Russian naturalist and explorer Langsdorff wrote in the early nineteenth century that:

[B]odies of the [Aleut] dead, especially the men, were formerly interred in places set apart for the purpose, and with particular ceremonies: their best javelins and clothes, with a portion of train-oil [whale oil] and other articles of

food, were laid with them in the grave; and sometimes even slaves of both sexes were slaughtered upon the occasion. These customs are now, however, entirely laid aside [Langsdorff 1814:48].

The Russian Orthodox priest Veniaminov provided perhaps the most complete report regarding traditional Unangan funerary practices, especially as they were observed on Atka Island. As previously noted, Veniaminov based many of his ethnographic studies on the works of the first resident Christian Orthodox priest in the Atka district, the Creole Father Iakov Netsvetov. Veniaminov reported:

Funerals varied in accordance with the wealth and status of the deceased. Notables, wealthy and outstanding hunters were buried with particular ceremony. Such deceased were dressed in their best garments and the body was placed, in a sitting position, in a small house-like structure dug in the earth and decorated in the best possible manner. The legs were pulled up toward the body, so that the body was flexed. The structure was then covered from above and totally covered with earth. If the deceased had been a hunter, all his hunting equipment was buried with him, unless he had willed it to someone. In such case, the tools and weapons were given to the one to whom they were properly willed. The poor and ordinary common people were buried simply in a hole in the ground, but also in a sitting position. Men who died at sea were disemboweled, in order to preserve the body as long as possible, and buried in a special manner.

The kin of the deceased, in order to demonstrate their affection and respect, to honor the deceased, and also in order to assuage their own grief, sacrificed slaves [Black 1984:176].

Elsewhere Veniaminov observed that:

This island is remarkable in that, on its western side, there is a cave where, even today, several corpses of unknown people are to be seen, suspend in cradles and next to them their entire possessions: mats, parkas, sea-otter remains, spears, various bundles, and the like. It is said that the corpses themselves as well as all their belongings appear quite whole and no one dares to touch them because, they say, even those who only had touched their spears were stricken with open wounds over all their bodies and died after long agonies... The Aleuts relate that some of the corpses, to this day in caves on one of the Four Mountain Islands, were in the same condition as they are now as when the Aleuts first [were] here. They [the corpses] lie [close] together,

side by side. They are clothed in dog fur parkas, their beards and hair are red, the skin on their bodies is black [Veniaminov 1984 (1840):72, 223].

The French explorer Alphonse Pinart observed that the four individuals he found in a funerary cave near Unga village in the Shumagin archipelago were laid out in an extended position on a bed of moss, each body separated from the other by a wooden frame (Pinart 1875:5). Because these individuals were not placed in a flexed position after death, Pinart (1875:6) believed that these individuals represented a "privileged class" of individuals, most likely whalers. Pinart based these observations on similarly interred whalers he encountered previously on Kodiak Island who were greatly respected and feared. Fragments of large wooden masks that he illustrated (several of which closely resemble those in the collections of the NMNH), miniature replicas of weapons and tools, and a wooden manikin of a human torso with carved limbs that were once movable, were located in different parts of the Unga funerary chamber (Krutak 2013:17).

William Healy Dall of the U.S. Coast and Geodetic Survey also recounted his experiences with the dead during his reconnaissance of the Aleutian Archipelago. Prefacing his eyewitness accounts, Dall noted the following:

The methods of burial among the Aleüts, at the advent of the Russian, were as follows:

Poor persons were wrapped in their clothes, or in mats, and laid under some over-hanging rock, with a mask over their faces. A little drift-wood was sometimes placed under the body, but very rarely any weapons or implements. Often, to enclose the bodies, a sort of artificial cave was made by building up a wall of rough stone outside the bodies, until the face of the over-hanging rock was reached; then the wall was closed over with earth and turf.

This sort of burial was noticed by me in several localities. On the island of Amakna'k, close to Iliuliuk Harbor, Unalaska, a number of places were discovered where such burials had been made. No implements were found in them, except one bone arrow with its shaft and some fragments of masks. There was usually some coarse matting, or sea-lion skin, about the bones, the remains of the original wrapper. The bodies appeared to have lain at full length on their backs. The bones were usually much injured by falling fragments of stone from above, and the percolation of moisture through the crevices of rocks. They had also been gnawed in many cases by the lemmings indigenous to the islands [Dall 1878:5].

On Atka Island, Dall documented similar mortuary practices at a particular cave site, but he also reported oral testimony recorded from local inhabitants:

[N]atives of the adjacent village believed that these skeletons held feasts and festivals, and that on returning to their original shelter they did not always take up the position that they had previously occupied.

The remains of those whom the early inhabitants held in honor, especially wealthy persons having large families, or distinguished by their ability and success in the chase, were differently disposed of [Dall 1875:5-6].

While on Unalaska in 1871, Dall interviewed the priest in residence who was himself a Native Unangan. Dall (1878:8) said this individual provided him with many details regarding burial localities and customs, and he "informed us that in the Island of Adakh, caves and rock-shelters were in use by the early natives for burial purposes, and that the reports of hunters confirmed the existence at the present day of some of these remains, with masks and other articles in their proximity."

On a return trip to Unalaska Island and Chernofski Harbor some years later, Dall recounted a description of a tomb of human remains accompanied with funerary objects of the type recorded by Russian travelers in the eighteenth century. He wrote:

Some years ago there still existed [here] remains accompanied by masks and carvings in the rock-shelters near the village. There was also a unique wooden tomb, constructed and carved with the ancient stone implements, in a very careful and elaborate manner, with the door so hung on wooden pins that it might be raised and the contents viewed, and by its own gravity would close itself on being released. In this tomb were the remains of a noted hunter, a toyon [chief] of eminence among the natives, surrounded by an enormous store of sea otter skins, garments, &c., all then in good preservation.

Since that time this tomb is said to have been rifled by an agent of one of the trading companies, and to have fallen into complete decay [Dall 1878:8].

Dall's experiences at Unga led him to believe that the interred individuals described by Pinart (1875) were not whalers; rather they were hunters, leaders, or other personages of prestige. Dall based this observation on the fact that he encountered the remains of women and children in the same cave:

If M. Pinart had been able to devote as long a time to the examinations of the cave as our party did, it is probable that he would have found sufficient reason for modifying or rejecting his first impression. The fact that the remains of women and children, some still retaining portions of their original wrappers, were found in this place by us, is proof that it could not have been one of the caves devoted to the preservation of the remains of whalers or fisherman,

from which women and children were, by the nature of the case, excluded [Dall 1878:30-31].

Russian ethnographer Waldemar Jochelson conducted archaeological work in the Aleutians beginning in the early twentieth century. In several of his published works, he provided interesting and useful notes regarding local beliefs concerning the dead and forms of inhumation:

Members of a family were very devoted to each other. Often they would not be separated from their dead relatives, and kept them for a long time in their homes, or in a separate compartment. This psychological peculiarity, it seems to me, was the origin of mummifying of the corpses of the distinguished or beloved dead. In order to preserve the corpse from decay they removed the intestines and wrapped the body in cured leather and coats made of intestines of sea-mammals. Then they placed the bodies on wooden trays in a squatting position; these trays were suspended in dry caves. The caves served not only as family burial places, but as village burial-places [Jochelson 1912:338].

In another publication, Jochelson recorded the oral testimony of an Aleut elder, a man who provided detailed information on traditional Unangan burial practices. Jochelson (1925:44-45) reported:

An old Aleut informed us that not all Aleuts were embalmed, this being the privilege of noted hunters, especially whale-hunters. The Atka Aleut regarded them as bewitched after death and called them *asxinan*, which properly means 'the departed ones.' The *asxinan* were hung up in caves in troughs resembling large cradles which were attached to a cross-beam resting on two posts. Colored posts were placed in front of the entrance, which was also painted in different colors...Corpses of honored people and of the families of chiefs were also mummified...

We were told by the Umnak Aleut that the mummified corpses of the members of the family of the late chief of Kagamilan Island are still untouched in one of the caves of the island.

The Aleut sometimes placed their dead in sod-covered mounds that often contained one or more pit burials. These structures, called *umqan* (Laughlin and Marsh 1954:28-29), have been found in several regions of the Aleutian Islands (Aigner and Veltre 1976; Frohlich and Laughlin 2002; O'Leary and Bland 2013).

Frohlich and Laughlin's (2002) work with Unangan elders and community members at the Native Village of Nikolski in the central Aleutians revealed additional details concerning

mortuary practices. When an individual dies, the soul is believed to leave the human body and travel to the afterlife if it has no lingering problems with the living. In these cases, the body is placed in a permanent burial structure within the community or in an *umqan* adjacent to it. However, if the soul of the deceased is restless because of enduring problems with the living the body is transported to an isolated location, like a burial cave, separated from the settlement by a body of salt water:

The access to the location has to be relatively easy so that everybody, including children and older people can visit and communicate with the body-trapped souls...When the soul is satisfied, it leaves the body and goes to another world; and the body can now be buried in a pit burial within the settlement or in an *Umqan*. The process can take a short or long time, possibly up to a year or longer [Frohlich and Laughlin's 2002:113].

V. HUMAN REMAINS AND FUNERARY OBJECTS FROM AMCHITKA, KISKA, AND LITTLE KISKA ISLANDS, ALASKA, IN THE COLLECTIONS OF THE NATIONAL MUSEUM OF NATURAL HISTORY

Published and unpublished sources demonstrate that the human remains and funerary objects assessed in this report were collected from burials located on Amchitka, Kiska, and Little Kiska islands, Alaska, in the nineteenth and twentieth centuries. These cultural materials likely date to the prehistoric period (pre-1740s) and historic period of the eighteenth through nineteenth century. Several individuals were responsible for removing the human remains and funerary objects and what follows is a descriptive account of their acquisition history.

Marcus Baker on Amchitka Island (1873)

Between 1873 and 1880, Marcus Baker was employed as an observer with the U.S. Coast and Geodetic Survey, surveying the Aleutian Islands, Arctic Ocean, and southeast Alaska (Baker 1906:18). During the season of 1873, he explored the Aleutian archipelago with William Healey

Dall and made subsequent collections of human remains, funerary objects, and objects of material culture from several islands, many of which were later presented to the U.S. National Museum through Dall.

On Amchitka Island, Baker acquired the human remains of one individual and 182 funerary objects, including 176 beads and six fragments of an iron axe, from a single grave near Constantine Harbor (Table 4 and Table 5). Baker did not provide a description of this burial in NMNH accession records or publications. However, Dall (1878:8) briefly described this individual in one of his publications:

We discovered in that year [1873] at Constantine Harbor, Amchitka Island, a

skeleton interred in the earth, together with the remains of a small iron celt [axe] and some old fashioned beads, showing that this interment was subsequent to the Russian advent; though at the time of our visit the island had been uninhabited for nearly forty years.

Dall's unpublished collections inventory for the year 1873 also records the individual and funerary objects collected by Baker and includes the original field numbers for these items: "251. Cranium, near Aleut village site, Constantine Harbor, Amchitka. Collector: M. Baker. 252. Remains of axe & beads found with 251, Constantine Harbor, Amchitka. Collector: M. Baker" (Smithsonian Institution Archives, Record Unit 7073, W. H. Dall Collection, Catalog 1873, Box 26, fldr. 8: n.p.). Three original collection tags found with the funerary objects confirm the

Table 4. Human Remains Collected by Marcus Baker on Amchitka Island, Alaska, in the Collections of the National Museum of Natural History, Smithsonian Institution.

Catalog No.	Field Number	Remains Present	Sex	Age in Years	Cultural Notes	Cranial Type
P242868	251	Cranium (mandible missing)	M	35 to 45	Evidence of possible labret wear	Neo-Aleut

Table 5. Funerary Objects Collected by Marcus Baker on Amchitka Island, Alaska, in the Collections of the National Museum of Natural History, Smithsonian Institution.

Catalog No.	Field Number	Object Description
A13029	252	6 Iron axe fragments and 176 beads

collection locality and provide additional details concerning the age of the materials. The first tag is labeled "U.S. Coast Survey" and records the following information: "from Aleut grave with skull no. 251. No. 252. Constantine Harbor Amchitka Island M. Baker. Remains of a small iron (adzed shaped) axe found with beads in a grave with remains of basket in which they had probably been placed. It is of the style which has been traded since the last century by the Russian American Co. in Alaska. W.H. Dall." A second tag missing a portion of its top contains handwritten script in pen stating: "M. Baker Amchitka Id. Remains of grass basket containing iron axe + beads, preserved by the incrustation of hyd[?] peroxide of iron. Aleut grave with skull No. 251. W. H. Dall." The remains of the grass basket have not been located in collections of the NMNH. A third original collection tag was found in a vial containing 176 beads of various shapes, colors, and sizes. It reads: "252. M. Baker. 13029 [catalog number]. In old Aleut grave with axe + remains of basket. These are Russian Am. Co's beads of old style + axe of their

make. W. H. Dall." Beads of these types and colors were common in the eighteenth and nineteenth century, but the entire assemblage likely dates to the first half of the nineteenth century (Bill Billeck, personal communication March 18, 2014). Thus, the preponderance of evidence suggests that these items are funerary objects.

Further examination of the human remains by the NMNH Repatriation Osteology Laboratory revealed that the female individual (P242868) collected by Baker displays wear and polish on the lip-side enamel of the mandibular left central incisor, suggesting the use of a labret. Labretifery of this type is consistent with the ethnographic record for female labret usage in the Rat Islands (Black 1984:54; Masterson and Brower 1947:134) and the Aleutian Archipelago (Hrdlička 1945:85-88). Labrets first appear in the Aleutian archaeological record ca. 4000-3000 BP (Davis and Knecht 2010:514). On the right parietal of the cranium in faded black ink is written "251. M. Baker, W. H. Dall, Prehistoric Aleut, Constantine Harbor, Amchitka." As noted, however, the presence of Russian trade beads and an iron axe with this individual more likely demonstrates that the burial dates to the historic period and not the prehistoric era.

The 182 funerary objects in one catalog number collected by Baker on Amchitka Island in 1873 were accessioned into the collections of the USNM (later NMNH) on December 30, 1873, under Accession number 3035. The human remains were also accessioned into the collections of the USNM on December 30, 1873, as part of Accession 3035 that included "Ethnol. & Osteol. Specimens [from the] Aleutian Ids." However, no additional information concerning the contents of this accession is located in the records of the NMNH Registrar's office. After arrival at the USNM, the human remains retained their original field number (i.e., #251) until they were transferred to the Army Medical Museum (AMM) on January 5, 1874. The remains were catalogued under number 1039 at the AMM on March 21, 1874. On May 17, 1898, the human remains were transferred back to the USNM (later NMNH) and reaccessioned into the collections under accession number 33553 and given the SI catalog number P242868. The Repatriation Osteology Laboratory verified that the cranium collected by Baker bears the number "1039," which corresponds to the AMM catalog number for this individual.

In summary, Baker collected the human remains of one individual by one catalog number and 182 associated funerary objects in one catalog number at Constantine Harbor, Amchitka Island, Alaska.

Cultural Affiliation: P242868 and A13029

The human remains of one individual collected at Constantine Harbor, Amchitka Island, Alaska, by Marcus Baker can be dated to the historic period. The individual was interred with objects of the style traded by the Russian America Company in Alaska in the eighteenth and early nineteenth.

Several lines of evidence support the cultural affiliation of the human remains and

associated funerary objects collected by Marcus Baker at Amchitka Island to the Native Village of Atka. These include NMNH accession records and original field collection records; the historic record of Qaxun Aleut settlement on Amchitka Island, Alaska, and later Atka Island, Alaska; and the proximity of the historic burial site to a documented village. This evidence demonstrates that a relationship of shared group identity can be reasonably traced between the human remains and funerary objects to the descendants of the Qaxun Aleut and the Native Village of Atka. Therefore, the preponderance of evidence indicates that the human remains and funerary objects collected by Marcus Baker are culturally affiliated to the Native Village of Atka.

J. Hobart Egbert on Kiska Island (1904)

Dr. J. Hobart Egbert was a surgeon and field naturalist employed by the U.S. Coast and Geodetic Survey at the turn of the twentieth century. According to NMNH accession records, Egbert visited Kiska Island in the summer of 1904 making various natural history collections for a future publication (see Egbert 1905). On October 17, 1904, Egbert wrote the Assistant Secretary of the USNM stating his interest in donating his Kiska collections as a gift to the museum, which included "an Aleut skull for Dr. Hrdlička" (J. H. Egbert to Smithsonian Institution, 17 October 1904, p. 1; NMNH Accession Record 43808)(Table 6). The circumstances surrounding the acquisition of the human remains and the exact collection locality on Kiska Island where Egbert obtained the cranium have not been documented. On January 24, 1905, the cranium was accessioned into the collections of the USNM (later NMNH) under accession number 43808 and given the SI catalog number P228041. Examination of the cranium by the Repatriation Osteology Laboratory revealed that Egbert may have collected it on the surface of the ground or from a semi-subsurface burial. The posterior portion of the cranium is sun bleached, indicating exposure to the elements. Dark brown soil adheres to the exposed trabecular bone, within the dental sockets, and within the sutural lines on the surface of the skull. Rootlets adhere to the base of the cranium and the nasal cavity.

In summary, Egbert collected the human remains of one individual represented by one catalog number at an unknown site located on Kiska Island, Alaska.

Table 6. Human Remains Collected by J. Hobart Egbert on Kiska Island, Alaska, in the Collections of the National Museum of Natural History, Smithsonian Institution.

Catalog No.	Remains Present	Sex	Age in Years	Cultural Notes
P228041	Cranium	F	50+ years	---

J. Hobart Egbert collected the human remains of one individual at an unknown locality under unknown circumstances on Kiska Island, Alaska. Egbert found no artifacts or other temporal indicators associated with the human remains. As noted previously in this report, the ethnographic record indicates that the island was populated during the Russian era by Qax̄un Aleut. Radiocarbon dates obtained by USBIA and WAAPP archaeologists from a limited number of sites on Kiska Island indicate that prehistoric populations also inhabited the island (Funk 2011:30; O'Leary 2007:129). While the remains display sun bleaching due to surface exposure, suggesting a more recent burial, this may have resulted from earlier disturbance and thus the human remains cannot be dated with precision. They could date to the prehistoric or historic period.

Two lines of evidence support the cultural affiliation of the human remains to the Native Village of Atka. These include NMNH accession records and the historic record of settlement on Kiska Island, Alaska, and later Atka Island, Alaska. This evidence demonstrates that a relationship of shared group identity can be reasonably traced between the human remains and the descendants of the Qax̄un Aleut and the Native Village of Atka. Therefore, the preponderance of evidence indicates that the human remains collected by J. Hobart Egbert are culturally affiliated to the Native Village of Atka.

Aleš Hrdlička on Kiska and Little Kiska Island (1936)

Over the course of a long career, physical anthropologist Aleš Hrdlička was interested in many anthropological problems, including how the "peopling of America" took place (Hrdlička 1930:29). Believing that Alaska, the Aleutian Islands, and the opposite shores of Asia held the requisite clues, Hrdlička embarked on numerous expeditions to these regions conducting "systematic" archaeological and somatological field research in an attempt to elucidate the ancient migration routes and physical characteristics of the indigenous populations (Hrdlička 1930:30).

One research trip occupied the better part of four months during the summer of 1936 and resulted in a brief research report (Hrdlička 1937) and eventually a posthumous monograph, *The Aleutian and Commander Islands* (Hrdlička 1945), which covered the 1936 field season. Hrdlička's original diaries and field notebooks housed at the National Anthropological Archives were also consulted for this report, but these documents do not differ in any significant way from Hrdlička's 1945 publication.

Hrdlička and his excavation team spent 20 days (July 7-27) working intermittently on Kiska Island and Little Kiska Island in 1936. They established their base camp on Kiska Island from which they traveled to Little Kiska Island throughout their stay. Not until July 21, 1936, did Hrdlička locate any human remains, and on July 27 he departed the islands. Much of the time

Hrdlička was beset with bad weather and was compelled to seek shelter while waiting for passing storms to break. His fieldwork accounts are brief and rather undetailed concerning the human remains and artifacts he excavated.

On June 10, Hrdlička (1945:225-226) first described the site on Little Kiska Island where he would eventually locate human remains and objects of material culture: "A trapper's little weather worn cabin is near the shore on higher ground. A few rods away on a bluff a fine old site, clearly outlined from the tundra by its rich and darker vegetation. Bluff 30-40 feet high, very steep on the seaside...Nothing Russian. But again no sign of a burial ground." Later, on July 21, "all go to Little Kiska, excavate gloriously whole afternoon, get many good specimens. And at last even locate a burial high up on the bluff – isolated, male, Aleut, from Russian time" (Hrdlička 1945:230).

The following morning, Hrdlička and his team uncovered more human remains at the site. "Work there strenuously...til 5:30...Found a number of interesting specimens today, including a human sacrum 12 feet down. Thus far but three isolated bones from the place, a tibia, ilium and now a sacrum, well apart, at different levels and probably from separate individuals...There is distinguishable neither cultural nor time separation of the accumulations" (Hrdlička 1945:230). Hrdlička continued working at this site for a few more days, but he does not record collecting additional human remains or any funerary objects. On July 23, he reiterates that "only three stray human bones" had been found "and no trace was seen anywhere of a burial place-yet somewhere the village must have had many burials" (Hrdlička 1945:232). As Hrdlička and his crew unearthed more archaeological materials, he provided a more detailed view of the occupation history of the site. He wrote: "Much of the deposits [are] undoubtedly pre-Russian, but about 2½ feet from the top there came out two native-made bone 'razors,' in one of which there was still a piece of iron. These are the only evidences of White man's influence that were recovered" (Hrdlička 1945:232).

WAAPP contributing archaeologist Stephen Loring of the NMNH briefly excavated at this site in 1993, which today is known as KIS-002 (Funk 2011:30). These excavations accidentally exposed the burial of a young Aleut child who was interred with a copper spoon and more than a dozen small white trade beads, likely dating to the late-eighteenth century (Loring 1993:5). Other cultural deposits were uncovered dating to the prehistoric period. Charcoal removed from a whalebone lined pit produced a radiocarbon date of 420±60 BP. Charcoal from a lower shell level dated to 2300±100 BP. The child's skeleton was left *in situ* and later reburied (Loring 1993:5).

On July 24, 1936, bad weather arrived and excavations were delayed. Not until the afternoon of July 25 was Hrdlička able to return to Little Kiska. Then, at 2 p.m. Hrdlička and his crew made landfall and "excavate[d] briskly till after 6, f[ou]nd a number of specimens and also

a piece of a human skull, but no burial" (Hrdlička 1945:233). This brief entry concludes Hrdlička's description of his archaeological work on Little Kiska Island.

On July 26, 1936, Hrdlička and his excavation team located a large site on Kiska Island that consisted of numerous pits once housing subterranean dwellings. Here, they also "find most of first and a part of another skeleton (less skull)" as well as other human remains "of the usual Aleut type" and various "archeological specimens," which are not described or identified as coming from burials (Hrdlička 1945:236). Hrdlička (1945:236) wrote the site "must have been occupied for a considerable time and from well before the Russian arrival," because "[w]e found no specimens of White man's origin, and there was no trace of any such in the talus of the site or on the beach in front." This extensive site, which covers three separate site locations (i.e., KIS-005, KIS-032, KIS-033), was later investigated by the USBIA revealing intact cultural deposits and stone tools, with "the artifacts present indicat[ing] a prehistoric occupation" (Funk 2011:43; USBIA 1992). On July 27, Hrdlička and his crew depart the region for points east and no further information is recorded for the burial sites excavated on Kiska Island and Little Kiska Island.

The original USNM accession and catalog records document that Hrdlička acquired the human remains of at least five individuals from Little Kiska Island and one individual from Kiska Island. However, examination of the human remains by the NMNH Repatriation Osteology Laboratory revealed that the commingled remains of four additional individuals were collected at Little Kiska Island and are present in NMNH catalog numbers P377757 RO-A through P377757 RO-C and P377758B. These remains appear in Table 7. Furthermore, two individuals, a male and female (P377755 and P377757), display probable evidence of labret usage, a custom documented for the inhabitants of the Rat Islands (Black 1984:54; Masterson and Brower 1947:134). Most of the human remains display adherent rootlets and possess soil in recessed areas. They also exhibit varying degrees of soil staining, sun bleaching, and a few possess excavation damage. NMNH accession and catalog records indicate that a funerary object (E378912), a Russian Orthodox Cross dating to the historic period, was collected in 1936 by Hrdlička on Little Kiska Island (Figure 2). This object is not described in Hrdlička's report. According to the NMNH catalog card record, this object was found "with a female burial on Little Kiska Island. Burial on top of cliff" (Table 8). Hrdlička unearthed the remains of three females on Little Kiska Island, but there is insufficient documentation to reassociate this object with a particular female burial.

Notwithstanding, this funerary object is listed under a different accession number (143191) than the human remains (138127) acquired by Hrdlička in 1936. More specifically, a number of material objects collected from localities visited by Hrdlička in 1936, including Little

Table 7. Human Remains Collected by Aleš Hrdlička on Little Kiska and Kiska Island, Alaska, in the Collections of the National Museum of Natural History, Smithsonian Institution.

Catalog No.	Card Catalog Provenience	Remains Present	Sex	Age in Years	Cultural Notes	Cranial Type
P377755	"Little Kiska Island"	Cranium, mandible, postcrania	F	50+	Evidence of possible labret wear	Neo-Aleut
P377756	"Little Kiska Island"	Cranium, mandible, postcrania	F	30 to 39	---	Neo-Aleut
P377757	"Little Kiska Island"	Cranium, mandible, postcrania	M	30+	Evidence of possible labret wear	---
		Commingled postcrania (right arm bones)	M	35 to 49	---	---
P377757 RO-A		Left ulna	U	4 to 6	---	---
P377757 RO-B		Right pelvis	U	10 to 14	---	---
P377757 RO-C		Left tibia	F	30+	---	---
P377758	"Little Kiska Island"	Partial postcrania	F	50+	---	---
P377758A	"Little Kiska Island"	Right pelvis	M	30 to 40	---	---
P377758B		Sacrum	M	35+	---	---
P377759	"Kiska Harbor, Big Kiska Island"	Left pelvis	F	35 to 45	---	---

Kiska Island, "were not at hand when the 1936 collection was listed," while "other specimens" in these inventories "may belong to [Hrdlička's] 1936 or 1938 collection [from the Aleutians] but cannot positively be identified with either" ("Accession Memorandum 143191," Smithsonian Institution, [ca. 1946]; NMNH Accession Record 143191). Hrdlička only visited Little Kiska Island during his 1936 expedition to the Aleutian Islands and the cross was accessioned in 1937.

Hrdlička's Kiska Island and Little Kiska Island collection of human remains was accessioned into the USNM on February 4, 1937, under number 138127. The single funerary object from Little Kiska Island entered the collections of the USNM on October 5, 1937, under number 143191.

It should be noted that the cranium under catalog number P377755 displays the words "Amaknak Island" on one of its surfaces. However, "Amaknak" is written overtop an area where previous writing once existed but was subsequently rubbed out. Using ultraviolet (UV) light, or black light, the Repatriation Osteology Lab was able to visualize portions of the removed ink and determined that "Little Kiska" was written underneath "Amaknak." All other skeletal elements



Figure 2. Russian Orthodox cross (E378912) from Little Kiska Island.

Table 8. Funerary Object Collected by Aleš Hrdlička on Little Kiska Island, Alaska, in the Collections of the National Museum of Natural History, Smithsonian Institution.

Catalog No.	Object Description
E378912	Metal cross

from P377755, including the mandible and maxilla (the jaws of the skull) and the postcranial skeletal elements of the body, have "Little Kiska Island" written on them, confirming the correct provenience information for this individual.

Cultural Affiliation: Accessions 138127 and 143191

Hrdlička (1945) and Loring (1993) demonstrated that the Little Kiska Island site, known today as KIS-002, contained both a prehistoric and historic cultural component. Hrdlička collected the remains of one male at Little Kiska Island "high up on the bluff" above KIS-002 that dated to the "Russian" or historic period. However, Hrdlička collected the remains of two

additional males on Little Kiska Island, but no artifacts or other temporal markers were associated with them. Because these excavations were poorly described and documented, it is not possible to determine which individual Hrdlička disinterred atop the bluff or the age of the other individuals. The human remains of six additional individuals collected at Little Kiska Island, Alaska, by Hrdlička cannot be dated with precision because they were also poorly described and documented. The taphonomic appearance of these remains indicates a subsurface burial but no other evidence (such as desiccated soft tissue) that may provide an indication of the relative time period of their interment is present. Only one of these individuals was associated with a temporal marker: a metal crucifix dating to the historic period, but it is not possible to determine which individual was interred with the cross. Hrdlička also collected the remains of one individual at a large site on Kiska Island. Today, this site is known to span several site locations (KIS-005, KIS-032, KIS-033). Hrdlička (1945) and others (Funk 2011; USBIA 1992) reported that the cultural deposits here present a prehistoric occupation.

Several lines of evidence support the cultural affiliation of the human remains and funerary object collected by Hrdlička at Little Kiska Island and Kiska Island to the Native Village of Atka. These include NMNH accession and catalog records; the historic record of Qaġun Aleut settlement on Little Kiska Island and Kiska Island, Alaska, and later Atka Island, Alaska; and the proximity of Kiska Island and Little Kiska Island burial sites to villages documented by Hrdlička on Kiska Island and Little Kiska Island. This evidence demonstrates that a relationship of shared group identity can be reasonably traced between the human remains and single funerary object to the descendants of the Qaġun Aleut and the Native Village of Atka. Therefore, the preponderance of evidence indicates that the human remains and single funerary object collected by Hrdlička at Little Kiska Island and Kiska Island are culturally affiliated to the Native Village of Atka.

Olaus J. Murie on Amchitka Island (1937)

Dr. Olaus J. Murie was a wildlife biologist who joined the U.S. Biological Survey, forerunner of the U.S. Fish and Wildlife Service, in 1920. During fieldwork in the Aleutian Islands in the summer of 1937, Murie excavated the human remains of what he thought was one individual from a site at Constantine Harbor on Amchitka Island. In an unpublished letter located in the accession file (Accession 145319) for the human remains, Murie drew a map indicating the depth ("6 feet") where he found the skeleton. He also described the collection site in some detail:

AMCHITKA ISLAND – ALEUTIANS. In old village site in Constantine Harbor, near present village. Depth from nearest upper surface – 6 feet. Horizontal distance from slope – 6 feet. Skeleton lay on a compact, old layer of sea urchin remains, with some soil, in which some of the bones were partially sunk. It was covered by a newer, looser layer of sea urchin debris. No

artifacts or vestige of covering was found with skeleton. It appeared as if the person died or was killed in the village itself and left there. The limbs were sprawled irregularly. Some of the bones partly embedded in supporting stratum were soft and badly decayed, the parts enclosed by the upper looser stratum were firmer [O. J. Murie to Smithsonian Institution, July 1937; NMNH Accession Record 145319].

On September 28, 1937, the human remains were received by the USNM. On November 30, 1937, they were accessioned under number 145319 and given the catalog number P378250.

Hrdlička wrote to Murie thanking him for the gift and stating that it had been received in good order. He noted: "This [skeleton] is the only specimen of this nature from that island, and it shows a pre-Aleut strain which we located this year for the first time also on several of the other islands" (Aleš Hrdlička to O. J. Murie, 29 September 1937, p. 1; NMNH Accession Record 145319. NMNH Registrar's Office, Smithsonian Institution, Washington, D.C.).

In November 1937, Murie replied to Hrdlička and provided more details about the location of the site, explaining that it was "a few hundred yards northwest or at least westerly, from the little native trapping village. There is the usual bluff, apparently rocky under the soil, but debris resulting from the ancient village and from other causes probably, has placed a heavy layer over the rock, obscuring the original rocky bluff" (O. J. Murie to Aleš Hrdlička, 26 November 1937, p. 1; NMNH Accession Record 145319).

Examination of the human remains by the Repatriation Osteology Laboratory revealed that Murie collected the remains of at least two individuals from the burial site at Constantine Harbor (Table 9). Apart from the nearly complete cranium, mandible, and damaged postcranial skeleton of an adult male, aged 45 years or older, are three commingled adult skeletal elements (cervical vertebrae and two incomplete left ribs) belonging to an individual, sex undetermined, aged 35 years or older. The male individual displays evidence of damage caused by excavation and traces of soil and rootlets adhered to the surfaces of the bone. Planar wear and polish on the mandibular right incisors suggests labret wear. The custom of labret usage is consistent with the ethnographic record for males in the Rat Islands (Black 1984:54; Masterson and Brower 1947:134). Original collection tags verifying the provenience location were also found during the physical documentation of the remains. A small slip of paper is labeled "Amchitka I'd/ 378250 / gift / O.J. Murie." Another piece of paper notes "Catalogue #378250 / skull gone to Dr. Hrdlicka." A third note by Murie includes a drawing of the burial context and repeats the previously noted site information located in the accession files of the NMNH Registrar's Office for accession record 145319.

Table 9. Human Remains Collected by Olaus J. Murie on Amchitka Island, Alaska, in the Collections of the National Museum of Natural History, Smithsonian Institution.

Catalog No.	Remains Present	Sex	Age in Years	Cultural Notes	Cranial Type
P378250	Cranium, mandible, postcrania	M	45+	Evidence of possible labret wear	Paleo-Aleut
P378250 RO-A	Commingle postcrania (cervical vertebrae and two incomplete left ribs)	U	35+	---	---

The NMNH Repatriation Osteology Laboratory also documented the presence of a mammal bone, perhaps a rib (A574857), found in the box with the human remains listed under catalog number P378250. As noted, Murie stated that "[n]o artifacts" were found with human remains collected from the Amchitka midden deposit. Therefore, the preponderance of evidence suggests that the faunal bone is not a funerary object placed intentionally with the human remains at the time of burial. Moreover, it cannot be confirmed if this object was found *in situ* with the remains themselves, or how it came to be in the box with the remains.

In summary, Murie collected the human remains of two individuals represented by one catalog number at a site located near Constantine Harbor, Amchitka Island, Alaska.

Cultural Affiliation: P378250

The site where Olaus J. Murie collected the human remains was later dubbed the "Lower Site" by Aleš Hrdlička in 1938 (see below). Murie found no artifacts or other temporal indicators associated with the subsurface buried human remains. Hrdlička (1945:351) and Turner (1970:123) documented that the midden contained a prehistoric and historic cultural component. Corbett et al. (2008:59) reported that the site spans the prehistoric through early historic periods (AD 1200-1800). However, both P378250 and P378250 RO-A display desiccated tissue and dried decomposed soft tissue. This evidence suggests that the human remains probably date to a more recent period. While the human remains cannot be dated with precision, they could date to the historic period.

Several lines of evidence support the cultural affiliation of the human remains collected by Olaus J. Murie from Amchitka Island to the Native Village of Atka. These include NMNH accession records and original field collection records; the historic record of Qaxun Aleut settlement on Amchitka Island, Alaska, and later Atka Island, Alaska; and the proximity of the burial site to a documented village. This evidence demonstrates that a relationship of shared group identity can be reasonably traced between the human remains to the descendants of the Qaxun Aleut and the Native Village of Atka. Therefore, the preponderance of evidence indicates that the human remains collected by Olaus J. Murie are culturally affiliated to the Native Village of Atka.

Aleš Hrdlička on Amchitka Island (1938)

Hrdlička's archaeological work in the Rat Islands continued during his 1938 expedition to Amchitka Island. Hrdlička and crew spent the better part of three weeks collecting human remains and objects of material culture between June 12 and July 5, 1938.

The expedition's first stop was at Constantine Harbor where "[t]hree of us will live in a little house just put up there by the Bureau of Fisheries, three in a native hut. An old site is seen within 300 yards and seems of promise" (Hrdlička 1945:349). On June 13, 1938, Hrdlička's crew uncovered the first human remains, a male skeleton, at the site he dubbed the "Lower Site" as well as objects of material culture. Two days later he located another "old" site, later called the "Hill Site," about $\frac{1}{4}$ of a mile northeast of the first, "on a 40ft. high bluff, above a fine old otter ground. No caves in cliffs" (Hrdlička 1945:350).

On June 17, Hrdlička (1945:350-351) reflected on his experiences and observations thus far on Amchitka:

Evidence of the pre-Aleut people evasive here –cannot as yet locate old burials.

The accumulations on the lower and nearer site will not it seems exceed 10 feet in depth. The bulk of the site is evidently pre-Russian and probably pre-Aleut, with Aleut veneer, same pattern and general characteristics as in other parts of the archipelago. But even the deep parts here cannot evidently extend very far back in time. No really ancient sites as yet have been seen in all these islands – a couple of thousands of years and less would amply account for all the remains thus far explored.

The following afternoon, Hrdlička's team exhumed another male skeleton from beneath a house depression at the Lower Site, which was labeled "pre-Aleut." Hrdlička photographed the burial for his publication (Hrdlička 1945:352, Fig. 136). Because Hrdlička's field notes are fragmentary it is not possible to positively identify which individual in the NMNH collections is pictured in Hrdlička's photograph, but a "nice stone knife" was "found with [the] body." According to NMNH accession and catalog records, a stone knife collected by Hrdlička from the Lower Site is housed in the collections of the museum. However, multiple objects labeled as "Stone knives & frags" and "stone-like knife & fgt." also appear in Hrdlička's object inventory for this site. The photograph of the burial does not lend itself to much detail and it is not possible to identify a stone knife in the picture. Moreover, Alan May, one of Hrdlička's field assistants, wrote in unpublished field notes that the knife was not necessarily found in direct association with the body: "Nearby, possibly buried with the body, [was] found a knife..." (Veltre 2013:398). Because several objects in the collections of the NMNH from the Lower Site possibly fit the description of the object, it cannot be identified in the NMNH collections at this time.

Furthermore, the available evidence suggests that this item may not have been found in direct association with the burial and therefore it may not have been a funerary object.

Hrdlička continued working at the Lower Site until June 25, 1938. According to his published account of these days, he found multiple stone lamps,¹⁰ "a skeleton of a young woman – skull, faceless, crushed in rocks," "isolated parts of skeletons," and another female skeleton, "a girl of about 17 – bones lying on a bed of whale ribs (pieces), parts displaced curiously, lower jaw and two teeth... Yet evidently a flexed burial. A small stone lamp with the bones..." (Hrdlička 1945:353). Hrdlička photographed the burial for his publication (Hrdlička 1945:354, Fig. 137). Upon review of NMNH accession records, catalog records, and stone lamps collected by Hrdlička at Amchitka Island, it is not possible to positively identify in the NMNH collections which of these lamps might be the funerary object pictured in his photograph. Lamps from Amchitka Island in the collections of the NMNH vary in size. Moreover, because Hrdlička's field notes are fragmentary it is not possible to positively identify which individual in the NMNH collections is pictured in Hrdlička's photograph.

As noted, Hrdlička initiated archaeological work at the Hill Site on June 25, 1938. Upon review, he remarked in characteristic brevity: "Differs in many respects from the lower one, more chipped knives and scrapers, but lamps identical. Local, family and individual variants or peculiarities in culture, on same main basis, even more obvious" (Hrdlička 1945:356).

For several days Hrdlička's team excavated at the Hill Site on Amchitka Island but they encountered no human remains. On June 28, he summed up his interpretation of the habitation history of the two sites, stating that the pre-Aleut and Aleut people lived on the same sites:

Exposures everywhere now high, stratified, and always interesting, but not easily interpretable. There are no definite subdivisions of the deposits, the stratification being evidently secondary and incidental. As at Agatu [sic] so here there lived on the same sites, it is now definite, both the pre-Aleut and later the Aleut, but there is no line of demarcation between the two [Hrdlička 1945:357].

The following day human remains were found at the Hill Site, a "third skeleton...without

¹⁰ NMNH catalog and accession records list more than 15 stone lamps from "Amchitka Island" collected by Hrdlička; more still (n=2) are specifically listed as coming from the "Hill Site." Numerous lamp fragments and lamps in various stages of construction were also obtained from Amchitka and the Hill Site. None of the stone lamps in these records are documented as coming from the "Lower Site." However, Hrdlička (1944: 349, 352, 353) states in his written account of the Lower Site that he and his excavation team collected multiple lamps from this locality. For example, on June 13, 1938, his crew found "two simple lamps" at the Lower Site; on June 19, 1938, "several lamps" were collected at the Lower Site; and on June 20, 1938, two of his crew each "got a lamp today with a prow at each end." None of these descriptions refer to the lamp that was found with the female burial that Hrdlička photographed at the Lower Site.

the skull," and at the Lower Site crew members collected a stone dish, though smaller than "the pots" at the Hill Site. Hrdlička (1945:357, 359) wrote: "This, as well as other things, shows the old inhabitants of both sites to have been the same people and except on the surface in all probability pre-Aleut. There were some cultural differences between the two settlements, though only such as could be found in different groups of the same people."

On July 1, 1938, Hrdlička remarked that some aspects of the material culture collected from the two Amchitka sites were unlike that encountered on other Aleutian Islands, demonstrating that the inhabitants of Amchitka and the Rat Islands had their own distinct cultural traditions. Hrdlička (1945:359) observed:

Labrets here are of their own kind, with very high stem or body. The spear or dart foreshafts and other items are also peculiar. Yet lamps, awls, the bi-faced rubbing-stones (rare), and other objects, are as elsewhere in the Islands, and the taking of skulls from burials, with dissemination of individual bones through the deposits, is much as at Uyak. But we need more skulls and skeletons, have nowhere nearly enough yet for a satisfactory representation.

During the final two days of the Amchitka excavations, Hrdlička collected additional human remains from the Hill Site and other artifacts (hunting equipment, labrets, domestic items), none of which were identified as funerary objects. In a summary statement, he concluded that the population history of the entire Aleutian chain was certainly complex and required further scientific attention:

It has now become certain that these islands, at least those from Umnak westward, but probably all, were once occupied by a pre-Aleut people, of different physical type and in some respects different culture than the Aleut. Their heads averaged meso- to dolichocephalic and, though not very high, were distinctly higher than the Aleut heads, and with better frontal development (arching). But though here first and for a long time, they were evidently not very ancient – all surely within the Christian era; and they continued, from Umnak westward at least, up to the Aleut invasion and even to the advent of the White man. They mixed, it seems, with the Aleuts in places, and the Aleuts of today probably still have some of the blood of these predecessors [Hrdlička 1945:361].

Hrdlička's Amchitka Island collection of human remains was accessioned into the USNM on October 12, 1938, under number 149653. The NMNH catalog card record lists the

human remains in P378694 as coming from the Lower Site and remains in P378699-P378702 from the Hill Site. Human remains listed under NMNH catalog card records P378691-P378693 and P378695-P378698 are given a provenience of "Amchitka." Examination of the human remains by the Repatriation Osteology Laboratory revealed that remains of two additional individuals were present in catalog numbers P378691 and P378698. These remains appear as P378691 RO-A and P378698 RO-A in Table 10. Furthermore, four individuals, all male (P378691, P378693, P378694, P378699), displayed probable evidence of labret wear, a custom documented for the inhabitants of the Rat Islands (Black 1984:54; Masterson and Brower 1947:134). Most of the human remains display adherent rootlets and possess soil in recessed areas. They also exhibit varying degrees of soil staining, sun bleaching, and a few possess excavation damage.

Table 10. Human Remains Collected by Aleš Hrdlička on Amchitka Island, Alaska, in the Collections of the National Museum of Natural History, Smithsonian Institution.

Catalog No.	Remains Present	Sex	Age in Years	Cultural Notes	Cranial Type
P378691	Cranium, mandible	M	35 to 45	Evidence of possible labret wear	Paleo-Aleut
P378691 RO-A	Postcrania	M	25 to 30	---	---
P378692	Mandible postcrania	M	25 to 35	---	---
P378693	Cranium, mandible, postcrania	M	35 to 50	Evidence of possible labret wear	Neo-Aleut
P378694	Cranium, mandible, postcrania	M	16 to 18	Evidence of possible labret wear	Neo-Aleut
P378695	Cranium, mandible, postcrania	M	14 to 17	---	Neo-Aleut
P378696	Cranium, mandible, postcrania	U	13 to 15	---	Neo-Aleut
P378697	Cranium, postcrania	F	50+	---	Paleo-Aleut
P378698	Mandible, Postcrania	M	35 to 45	---	---
P378698 RO-A	Right femur	U	4 to 6	---	---
P378699	Mandible, postcrania	M	35 to 50	Evidence of possible labret wear	---
P378700	Cranium, postcrania	F	50 to 65	---	---
P378701	Cranium	M	35 to 50	---	Paleo-Aleut
P378702	Cranium, mandible, postcrania	U	9 to 13	---	---

Cultural Affiliation: Accession 149653

Aleš Hrdlička found no artifacts or other temporal indicators associated with the human remains he collected on Amchitka Island. He wrote that the "Lower Site" and "Hill Site"

contained a prehistoric and historic cultural component, but "there is no line of demarcation between the two" (Hrdlička 1945:357). Corbett et al. (2008:59) reported that both sites spanned the prehistoric through early historic periods (AD 1200-1800). The skeletal elements themselves do not display taphonomic characteristics that would assist in assigning a temporal period. Thus, the human remains cannot be dated with precision, because they could date to the prehistoric or historic period.

Several lines of evidence support the cultural affiliation of the human remains collected by Aleš Hrdlička on Amchitka Island to the Native Village of Atka. These include NMNH accession and catalog records; and the historic record of Qaxun Aleut settlement on Amchitka Island, Alaska, and later Atka Island, Alaska. This evidence demonstrates that a relationship of shared group identity can be reasonably traced between the human remains to the descendants of the Qaxun Aleut and the Native Village of Atka. Therefore, the preponderance of evidence indicates that the human remains collected by Aleš Hrdlička are culturally affiliated to the Native Village of Atka.

Warden Mangan on Amchitka Island (1940)

Warden Mangan was an employee of the U.S. Fish and Wildlife Service. During the summer of 1940, Mangan was engaged in the sea otter patrol and collected a "box of relics and bones" on Amchitka Island that were thought to be of interest to the USNM. More specifically, a letter in the NMNH accession file reads: "this box contains some human skulls and native spear heads which were dug up by Mr. Mangan while exploring the ruins of an old village, evidently of early Aleutian or Russian origin. There was evidence that death resulted from a fight as there was no indication of burial of the skeletons" (C. Jackson to A. Wetmore, 15 November 1940, p. 1; NMNH Accession Record 158314). No other information concerning this collection is located in the accession files of the NMNH or published literature. Moreover, there is no evidence to indicate that funerary objects were included in this donation to USNM, which was accessioned into the collections on December 10, 1940, under number 158314.

Examination of the human remains by the Repatriation Osteology Laboratory revealed that Mangan collected the remains of two individuals from Amchitka Island, Alaska (Table 11). The human remains inventoried as P379179 consist of a cranium and mandible of a male between 30 and 40 years of age. Rootlets and black soil adhere to the base of the cranium and the facial bones, mandible, and portions of the parietals show evidence of sun bleaching and surface exposure. This evidence supports NMNH accession records that the individual was buried or partially buried at the time of collection. Vertical scratches are visible on the labial enamel surfaces of the maxillary canines and left lateral incisor. Planar wear and polishing are present on the labial/buccal surfaces of the mandibular left lateral incisor and right first premolar. This overall pattern suggests labret wear and is consistent with the ethnographic record for male labret usage in the Rat Islands (Black 1984:54; Masterson and Brower 1947:134). The human remains

Table 11. Human Remains Collected by Warden Mangan on Amchitka Island, Alaska, in the Collections of the National Museum of Natural History, Smithsonian Institution.

Catalog No.	Remains Present	Sex	Age in Years	Cultural Notes	Cranial Types
P379179	Cranium, mandible	M	30 to 40	Evidence of possible labret wear	Paleo-Aleut
P379180	Cranium	U	30 to 45	---	Paleo-Aleut

(cranium only) inventoried as P379180 represent an individual of undetermined sex aged 30 to 45 years. Rootlets are present within the nasal cavity. Significant trauma to the cranium was documented and does not appear to represent excavation damage. Three fractures occur on the right side of the cranium, ranging from the right orbital roof on the anterior aspect, to the midpoint of the lambdoid suture on the posterior aspect of the skull, and superiorly towards but failing to reach the sagittal suture. The fractures display curved surfaces and stained edges consistent with the rest of the surrounding bone. The intersection of these fractures is on the right parietal, suggesting that some traumatic force occurred at that location either around the time of death or shortly after burial when the bone maintained organic flexibility. Unfortunately portions of the affected bones are not present, suggesting they were not recovered in the field or lost subsequently, and thus limit the determination of whether the fractures are due to trauma or postmortem taphonomic alterations.

In summary, Mangan collected the human remains of two individuals represented by two catalog numbers at an old village on Amchitka Island, Alaska.

Cultural Affiliation: P379179 and P379180

The human remains collected at an unnamed locality on Amchitka Island, Alaska, by Warden Mangan cannot be dated with precision. However, the skeletal remains of both individuals display soil staining consistent with subsurface burial, as well as likely decomposed and desiccated soft tissue suggesting a relatively more recent internment. Mangan stated that the remains were of "early Aleutian or Russian origin." In other words, these human remains could date to the historic period.

Several lines of evidence support the cultural affiliation of the human remains to the Native Village of Atka. These include NMNH accession records; the historic record of Qax̂un Aleut settlement on Amchitka Island, Alaska, and later Atka Island, Alaska; and the location of the burials within an Aleut village site. This evidence demonstrates that a relationship of shared group identity can be reasonably traced between the human remains to the descendants of the Qax̂un Aleut and the Native Village of Atka. Therefore, the preponderance of evidence indicates that the human remains collected by Warden Mangan are culturally affiliated to the Native

Village of Atka.

Paul Guggenheim on Amchitka Island (1943-1944)

Captain Paul Guggenheim, Medical Corps, Army Air Force, spent a field season in 1937 with physical anthropologist Aleš Hrdlička during the Smithsonian Aleutian Expedition. Guggenheim learned many things from Hrdlička and during World War II he put this knowledge to use while stationed on the remote outpost of Amchitka Island.

Amchitka Island was the United States' most advanced Aleutian base, especially after the taking of Attu and Kiska by Japanese forces during World War II. In May 1943, Guggenheim was deployed to Amchitka to help maintain the U.S. military presence and for the next year he and his military associates conducted numerous excavations around Amchitka, mapping some 40 "prehistoric" village sites (Guggenheim 1945). Guggenheim supplemented his archaeological collections with purchases of objects and human remains from several soldiers stationed on the island. The original source localities of the purchased items were poorly documented, because the "soldiers' depredations...reached almost epidemic proportions...[and] it was every man for himself, using the foxhole [excavation] technique for 'souvenir hunting'" (Guggenheim 1945:22).

Guggenheim donated the vast majority of his Amchitka collection of human remains to the USNM on November 27, 1944. Three catalog numbers of funerary objects representing three objects were also included. All of these items were accessioned under number 168967. The human remains excavated by Guggenheim come from four documented sites on Amchitka: sites he labeled 25, 16, 9, and 3 (Figure 3). Three funerary objects in three catalog numbers were

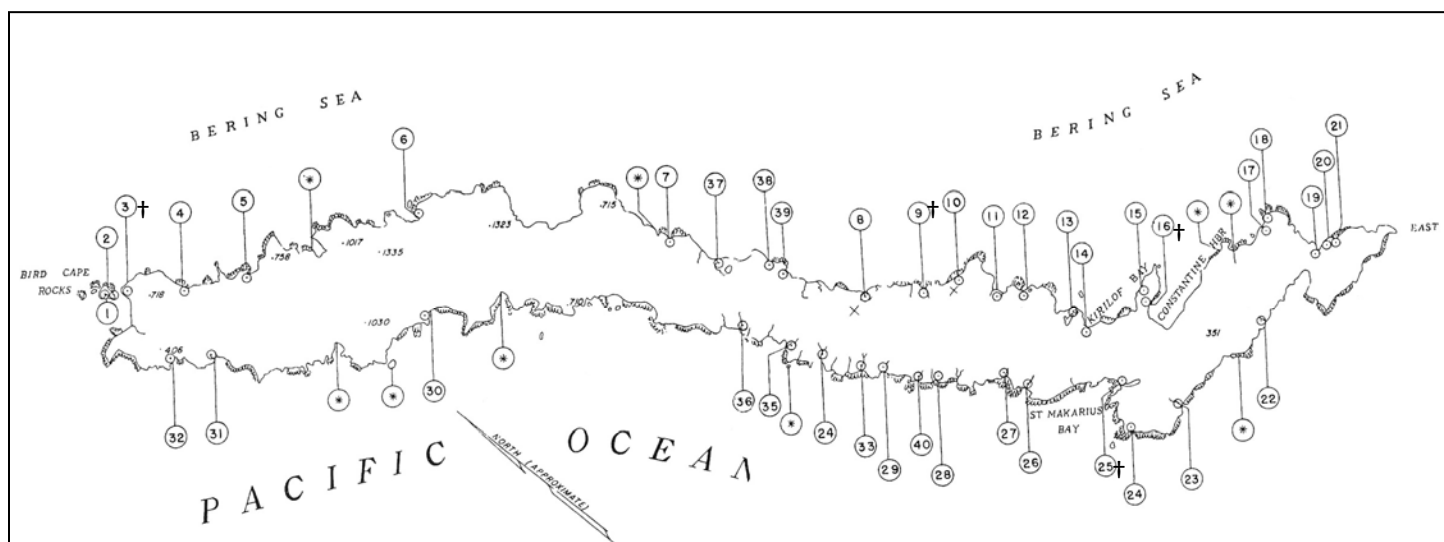


Figure 3. Amchitka Island sites mapped by Paul Guggenheim (after Guggenheim 1945:22-23). The † symbol denotes locations where human remains were collected.

obtained from Site 16, also known as the "Kirilof Cliff site." Little information on Guggenheim's Amchitka excavations exist in NMNH records, and for this reason reference is made below to Guggenheim's published article, "An Anthropological Campaign on Amchitka" for the popular magazine *The Scientific Monthly* (Guggenheim 1945), in order to obtain mortuary and provenience data as well as other relevant cultural information.

Site 25

The first site described by Guggenheim (1945) was Site 25, which he also called the "Clevenger-Makarius-Pacific site." The locality featured a village site occupying both banks of a stream that drained a lake and eventually emptied into St. Makarius Bay on the south side of Amchitka Island. Guggenheim described the site in some detail:

On the midden were two habitable barabaras [semi-subterranean structures], one fairly large, in which some of the enlisted men were living. There was also a little, one-room gray, frame house (since destroyed) built by the Bureau of Fisheries. Depressions left by old barabaras were evident in various places on the midden...[The site] was actively vandalized by as many as thirty [soldiers] at a time [and] was literally torn to pieces by the soldiers, and many skeletons were scattered and lost [Guggenheim 1945:25].

Guggenheim did not personally encounter any human remains or funerary objects during his excavations at Site 25. However, he later received a message from a military officer who had uncovered human remains at the site, which were given to Guggenheim. The human remains were given individual names by the soldiers who excavated the site. These names are reproduced below only because they link collection tags associated with the remains to a burial description. Guggenheim wrote:

[He] presented me with a fine skeleton that he had excavated from the northern side of the midden, 4 feet beneath the muskeg. "Oscar," as we called him, was a long-headed male, stretched out in a casual position in deposits of greenish shell mixed with dirt. Some bone harpoon points were found near him. This represented a moderately deep, but not the deepest deposit. Not long afterward "Mable" was found...uncovered near a barabara just beneath the muskeg on the flat side east of the stream. She lay in the knee-chest position, on, but not in, the shell deposit. Nearby was a badly shattered cranium ("Mable's friend"). In August another soldier contributed the complete skeleton of a young infant from the deepest layer of the midden. Both fontanelles were open; the cortex of the right mastoid tip was gone, and one could view some large cells within. It is possible that this infant died of mastoiditis with a Bezhold's abscess [Guggenheim 1945:25].

It cannot be determined if the "bone harpoon points" described above were accessioned into the collections of the NMNH or remained in the possession of Guggenheim. Guggenheim kept many objects of material culture from his Amchitka excavations for his "personal collection," including those items which he purchased from other soldiers (Guggenheim 1945:31).

Despite the soldiers' uncontrolled excavations at Site 25, Guggenheim could discern a historic and prehistoric occupation phase and he collected numerous stone and bone artifacts. He wrote: "The site is probably an old pre-Aleut one, with a thin overlay of post-Russian culture in the midden...[A corporal] found in the superficial layers of the midden several bone knife handles with rusty copper blades (much patina). He also had some round, glass, blue-and-white beads that a friend had found there" (Guggenheim 1945:25-26).

Through examination of NMNH accession records and Site 25 human remains by the Repatriation Osteology Laboratory it was revealed that the individual dubbed "Oscar" was probably P379713 (Table 12). A brown paper tag found with this individual reads: "CMP#1 'Oscar' / ... Male..." The NMNH accession record for Guggenheim's donation of Amchitka human remains from Site 25 confirms this attribution ("Amchitka Specimens," p. 2; NMNH Accession Record 168967). "Mable" has been associated with NMNH catalog number P379714, a male individual aged 45 to 49 years. A tan paper tag found with the human remains reads: "C-M-P 2 'Mable & Friend'" ... The NMNH accession record for Guggenheim's donation of Amchitka human remains from Site 25 confirms this attribution, because P379714 is listed as an adult male named "Mable" ("Amchitka Specimens," p. 2; NMNH Accession Record 168967). Furthermore, "Mable's friend" has been determined to be P379715. The NMNH accession record for Guggenheim's donation of Amchitka human remains from Site 25 confirms this attribution, because P379715 is listed as an adult female named "Mable's friend" ("Amchitka Specimens," p. 2; NMNH Accession Record 168967). NMNH card catalog records indicate that the human remains listed under numbers P379712 and P379716-P379718 were collected at "site 25."

The male individual under NMNH catalog P379714 exhibits polish and slight wear on the buccal enamel surface of the mandibular right canine, possibly representing labret wear. This overall pattern suggests labret usage and is consistent with the ethnographic record for male labretifery in the Rat Islands (Black 1984:54; Masterson and Brower 1947:134). All of the remains from Site 25 at Amchitka Island contain adherent rootlets, or show evidence of root staining, and possess soil in recessed areas, or exhibit soil staining on their surfaces. These characteristics are consistent with subsurface burials. Most of the remains also exhibit excavation or postmortem damage.

Table 12. Human Remains Collected by Paul Guggenheim on Amchitka Island, Alaska, in the Collections of the National Museum of Natural History, Smithsonian Institution.

Catalog No.	Remains Present	Sex	Age in Years	Site Number	Cultural Notes	Cranial Type
P379697	Cranium, mandible, postcrania	U	8 to 11	3	---	---
P379698	Cranium, mandible	U	1 to 2	3	---	---
P379699	Cranium	M	40 to 50	9	---	---
P379699 RO-A	Postcrania	M	20 to 24	9	---	---
P379700	Postcrania	M	14 to 17	9	---	---
P379700 RO-A	Postcrania	M	40 to 50	9	---	---
P379701	Cranium	F	18 to 25	9	---	---
P379702	Partial postcrania	M	40 to 50	9	---	---
P379702 RO-A	Partial postcrania	U	12 to 14	9	---	---
P379703	Cranium	F	30 to 45	9	---	Neo-Aleut
P379704	Cranium	F	35+	9	---	---
P379705	Cranium	U	8 to 11	9	---	---
P379706	Mandible	M	30 to 45	9	---	---
P379707	Postcrania	U	10 to 12	9	---	---
P379708	Cranium	U	7 to 10	9	---	---
P379709	Postcrania	F	60+	16	---	---
P379710	Cranium	M	45 to 55	16	---	---
P379711	Mandible	M	25 to 35	16	---	---
P379711 RO-A	Mandible	U	30 to 50	16	---	---
P379712	Cranium, mandible, postcrania	M	45+	25	---	Neo-Aleut
P379713	Cranium, mandible, postcrania	M	16 to 18	25	---	Neo-Aleut
P379714	Cranium, mandible, postcrania	M	45 to 49	25	Evidence of possible labret wear	Neo-Aleut
P379715	Cranium	F	60+	25	---	---
P379716	Cranium, mandible, postcrania	F	2 to 4	25	---	Neo-Aleut
P379717	Cranium	U	8 to 10	25	---	---
P379718	Right radius	M	35+	25	---	---

Site 16

Site 16 was situated above Kirilof Bay on the northern shore of Amchitka Island. Guggenheim traveled here on several occasions to relocate a site described by Hrdlička during his 1938 reconnaissance of Amchitka Island. Guggenheim presumed the site was Hrdlička's "Hill Site," and he wrote that part of the cliff upon which the locality rested was blasted away in a recent road building project. Guggenheim briefly described his archaeological work at the site, but he did not mention finding human remains or funerary objects at the site. He did, however, speak about extensive looting by soldiers and civilians in the service of the military. One of these

"diggings" resulted in the discovery of human remains, which were later discarded by the original collectors (Guggenheim 1945:26). Guggenheim also described artifacts collected by several soldiers, including carved ivory objects, labrets, and a stone lamp. But he provided no statements regarding the possible age of these collections or of the site itself.

According to NMNH collection and accession records, Guggenheim donated to the museum three catalog numbers of human remains from Site 16. One of these individuals was labeled "Suzie" and corresponds to P379709 ("Amchitka Specimens," p. 2; NMNH Accession Record 168967). This attribution is important because three funerary objects (A387677-387679) were listed in NMNH catalog records as being found with "Suzie de Kirilof," and now they can be reassociated (Table 13). No further information is recorded in NMNH accession or collection records pertaining to Guggenheim's collections at Site 16.

Examination of the human remains by the Repatriation Osteology Laboratory revealed that Guggenheim obtained the human remains of four individuals from Site 16. Each possesses adherent rootlets and soil on their surfaces. The possible presence of desiccated tissue was observed on the tibia of P379709. A tag found in the box containing P379709 confirms that this individual is the person discussed above, as the tag reads: "KCSC#1/ 'Suzie'..." The documentation of a second mandible in NMNH catalog P379111, that does not articulate with any cranium missing its mandible, indicates that the remains of a second individual are present. These remains appear in Table 12 as P379711 RO-A.

Table 13. Funerary Objects Collected by Paul Guggenheim on Amchitka Island, Alaska, in the Collections of the National Museum of Natural History, Smithsonian Institution.

Catalog No.	Object Description
A387677	1 Stone saw fragment
A387678	1 Stone saw fragment
A387679	1 Stone saw fragment

Site 9

Guggenheim very briefly mentions his archaeological research at Site 9, which was located on the northern shore of Amchitka. This entry is as follows:

One evening our mess sergeant and I set out for a site (No. 9) which was only about three-quarters of a mile from camp in which 14 skeletons were reported

to be lying exposed. We rounded one point on the Bering and came upon a huge green midden almost filling the bottom of a far-sized bay. There were many barabara holes, and in one particularly large one were the skeletons. Unfortunately someone had taken two-thirds of them and left the rest scattered about in utter confusion. I sorted them as best I could [Guggenheim 1945:27].

Guggenheim purchased artifacts from soldiers working the site and these were collected from the barabara dwellings. These objects included bone harpoon points, bird darts, and other hunting implements. But he provided no statements regarding the possible age of these collections or of the site itself.

NMNH accession and catalog records document that Guggenheim donated to the museum the human remains of 10 individuals in 10 catalog numbers from Site 9. However, examination of the human remains by the NMNH Repatriation Osteology Laboratory revealed that Guggenheim obtained the human remains of 13 individuals from this location. The presence of additional individuals is not surprising, since the remains were commingled when Guggenheim acquired them. Table 12 lists the remains of these additional individuals as P379699 RO-A, P379700 RO-A, and P379102 RO-A. The taphonomic characteristics of the skeletal elements collected from Site 9 are consistent with those described for other remains collected by Guggenheim on Amchitka, including excavation damage, soil staining, and adherent soil and rootlets.

Site 3

Guggenheim's account of his work at Site 3 located on "Bird Cape" is very limited. He describes finding "at a depth of only 2 feet" the "complete skeleton" of a child aged about six years, but little else (Guggenheim 1945:29). Guggenheim also noted that he collected several objects at the site (e.g., stone knives, stone lamps, rubbing stones), but he does not describe them as funerary in nature. Moreover, he provided no statements regarding the possible age of these collections or of the site itself.

NMNH accession and catalog records document that Guggenheim donated to the museum two human remains from Site 3. Examination of the human remains by the Repatriation Osteology Laboratory confirmed this information. Moreover, the individual listed as NMNH catalog P379697 probably refers to the "complete skeleton" acquired by Guggenheim at Site 3, because documentation of the remains revealed the presence of a cranium, mandible, and nearly complete postcrania of a child aged 8 to 11 years (Table 12). The other individual collected from Site 3 was an infant between 1 to 2 years of age.

All sites visited by Guggenheim on Amchitka Island were heavily disturbed by artifact-seeking soldiers. Their excavations were uncontrolled, poorly described, and largely undocumented. Due to these conditions, Guggenheim had difficulty in locating human remains and artifacts himself and he supplemented his collections with purchases and gifts from military personnel. Despite these difficulties, Guggenheim believed that Site 25 had both a prehistoric and historic component. Corbett et al. (2008:59) reported that the site spanned the prehistoric through early historic periods (AD 1200-1800). Most of the skeletal elements collected by Guggenheim at Site 25 do not display taphonomic characteristics that would assist in assigning a temporal period. However, those remains represented by catalog number P379713 display taphonomic indications consistent with subsurface burial, and also display possible adhering decomposed and desiccated tissue. Moreover, these human remains contain insect pupae casings in the nasal cavity, suggesting that the individual probably dates to a more recent period. In summary, the human remains collected at Site 25 by Guggenheim could date to the prehistoric or historic period.

Guggenheim worked briefly at Site 16. He did not excavate any artifacts here, but he purchased carved ivory objects, labrets, and a stone lamp from soldiers. However, he provided no statements regarding the possible age of these collections or of the site itself. Aleš Hrdlička (1945:357) also excavated at this site (i.e., "Hill Site") in 1938 and noted there was a prehistoric and historic component, but there was "no line of demarcation between the two" occupation periods. Corbett et al. (2008:59) reported that the site spanned the prehistoric through early historic periods (AD 1200-1800). Most of the skeletal elements collected by Guggenheim at Site 16 do not display taphonomic characteristics that would assist in assigning a temporal period. However, those remains represented by catalog number P379709 display taphonomic indications consistent with subsurface burial, and also display possible adhering decomposed and desiccated tissue. This evidence suggests that these human remains probably date to a more recent period. In summary, the human remains collected at Site 16 by Guggenheim could date to the prehistoric or historic period.

Guggenheim worked very briefly at Site 9. He collected several human remains that were previously excavated by soldiers and purchased artifacts from soldiers working the site. Guggenheim provided no statements regarding the possible age of these collections or of the site itself. Corbett et al. (2008:59) reported that the sites located in this region of Amchitka Island likely date to the early prehistoric period (800 BC-AD 600). Most of the skeletal elements collected by Guggenheim at Site 9 do not display taphonomic characteristics that would assist in assigning a temporal period. However, those remains represented by catalog numbers P379699, P379700, and P379704 display taphonomic indications consistent with subsurface burial, and also display possible adhering decomposed and desiccated tissue. This evidence suggests that

these human remains probably date to a more recent period. In summary, the human remains collected at Site 9 by Guggenheim could date to the prehistoric or historic period.

Guggenheim's description of his work at Site 3 is limited to brief observations. Moreover, he provided no information regarding the possible age of the human remains or objects he collected here. Corbett et al. (2008:59) reported that the site spanned the prehistoric through early historic periods (AD 1200-1800). The skeletal elements collected by Guggenheim at Site 3 do not display taphonomic characteristics that would assist in assigning a temporal period. In summary, the human remains collected at Site 3 by Guggenheim cannot be dated with precision because they could date to the prehistoric or historic period.

Several lines of evidence support the cultural affiliation of the human remains and funerary objects to the Native Village of Atka. These include NMNH accession and catalog records; the historic record of Qaxun Aleut settlement on Amchitka Island, Alaska, and later Atka Island, Alaska; and the proximity of the burial sites to documented settlement localities. This evidence demonstrates that a relationship of shared group identity can be reasonably traced between the human remains to the descendants of the Qaxun Aleut and the Native Village of Atka. Therefore, the preponderance of evidence indicates that the human remains collected by Paul Guggenheim at Amchitka Island are culturally affiliated to the Native Village of Atka.

VI. SUMMARY OF CULTURAL AFFILIATION AND REPATRIATION RECOMMENDATIONS

This report provides an inventory and assessment of the human remains of an estimated 56 individuals represented by 46 catalog numbers and 186 funerary objects in five catalog numbers in the collections of the NMNH. Of these, the remains of one individual and 182 associated funerary objects were collected in 1873 by Marcus Baker from a burial in the vicinity of an Aleut village site located on Constantine Harbor, Amchitka Island. The remains of one individual were collected by Dr. J. Hobart Egbert in 1904 at a site on Kiska Island. In 1936, the human remains of an estimated 10 individuals were obtained by Aleš Hrdlička on Little Kiska and Kiska Island, Alaska. Hrdlička also acquired a funerary object from Little Kiska Island in 1936. The human remains of two individuals were excavated by Dr. O. J. Murie in 1937 from an old village site situated on Constantine Harbor, Amchitka Island. Additional human remains of an estimated 14 individuals were exhumed in 1938 by Aleš Hrdlička from sites on Amchitka Island. The human remains of two individuals were collected by Warden Mangan in 1940 from an old village on Amchitka Island. Finally, the human remains of an estimated 26 individuals and three associated funerary objects were collected by Captain Paul Guggenheim on Amchitka Island in 1944. A relationship of shared group identity can be reasonably traced between the Qaxun Aleut human remains and funerary objects documented in this report and members of the Native Village of Atka, a federally recognized tribe.

The preponderance of available evidence gathered from published and unpublished sources supports the determination that the human remains and funerary objects from Amchitka, Kiska, and Little Kiska Islands, Alaska, are culturally affiliated with the Native Village of Atka. Therefore, the NMNH Repatriation Office recommends that 56 individuals in 46 catalog numbers and 186 funerary objects in five catalog numbers from these Aleutian Islands be made available for repatriation to the Native Village of Atka.

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APPENDIX A: POSTCRANIAL METRIC ANALYSIS OF HRDLIČKA'S PRE-ALEUT AND ALEUT HUMAN REMAINS IN THE COLLECTIONS OF THE NATIONAL MUSEUM OF NATURAL HISTORY

Hrdlička maintained that the original occupants of the Aleutian Islands, who he called Pre-Aleuts, were faced with the in-migration of new people around 1000 BP who he simply called Aleuts. These two hypothesized groups have respectively come to be referred to as Paleo- and Neo-Aleuts and these classifications will be used in the accompanying text, tables, and figure below. It is important to test whether these perceived groups have significantly different trait profiles, potentially indicating biologically distinct groups that may or may not be ancestral to living peoples, and thus contribute to the overall determination of cultural affiliation in this report.

According to Hrdlička, the Paleo-type generally displayed higher and narrower heads and the Neo-type displayed low round heads and broad faces. In addition, Hrdlička's measurements of the postcranial bones suggested that the Paleo-Aleuts were both taller and more robust than the Neo-Aleuts (Hrdlička 1945). Ousley and Jones (2010) investigated the cranial morphometrics between these groups, and found no relationship between cranial morphology and the Paleo- and Neo-Aleut aDNA results of other researchers. However, Hrdlička's purported difference in postcranial skeletal remains has not been previously addressed. Therefore this appendix addresses one more piece of the population history puzzle as to whether Paleo- and Neo-Aleut remains represent distinct peoples, and whether this has any impact on a determination of cultural affiliation. Is there a statistical difference between Paleo- and Neo-Aleut postcranial skeletal metric observations?

In order to maximize sample size, the mean lengths of the major postcranial long bones - femur, tibia, humerus, radius, and ulna - as well as the robusticity index (see Stock and Shaw 2007) of the femur, tibia, and humerus of Paleo- and Neo-Aleuts were compared from across the entire Aleutian Island chain using Hrdlička's cranial type designation found in his Catalog of Crania (Hrdlička 1944). Left side measurements were preferred, but when not available for an individual the right side was included for comparison. Given that the sample variance was shown to be unequal (see Table 14 and 15), Welch's two-tailed t-test was implemented to challenge the null hypothesis that the mean value of Paleo- and Neo-Aleut long bone lengths and robusticity index are not different.

None of the t-statistics generated significant values at $p < 0.05$ with degrees of freedom ranging from 28 to 41 for lengths, and 26 to 30 for the robusticity indices. These results indicate that, contra to Hrdlička's (1945) hypothesis, there is no significant difference between the two groups in the major postcranial bone lengths or robusticity. Figures 4-7 plot the leg bone lengths as an example of how these distributions overlap. However, it is perhaps of interest to note that the Neo-Aleut bone statistics display a trend towards increasing variance, perhaps suggesting an amalgamation of two or more groups of people, which is consistent with ancient DNA results.

Table 14. Postcranial Long Bone Length Summary Statistics (Mean, Standard Deviation, Sample Size, and Variance) of Paleo- and Neo-Aleut used in Welch's Two-tailed T-tests.

	Femur		Tibia		Humerus		Radius		Ulna	
	Mean	Standard deviation	Mean	Standard deviation	Mean	Standard deviation	Mean	Standard deviation	Mean	Standard deviation
	Sample Size	Variance	Sample Size	Variance	Sample Size	Variance	Sample Size	Variance	Sample Size	Variance
Paleo-Aleut Males	421.7	20.4	338.4	16.3	306.0	17.7	233.4	10.1	253.9	9.4
	20	428.9	20	265.3	22	321.5	20	110.9	18	100.8
Females	391.5	12.5	311.0	12.2	283.3	8.8	210.3	7.4	229.6	8.2
	13	145.9	17	161.9	18	66.8	18	60.2	17	71.7
Neo-Aleut Males	418.9	24.1	339.6	18.5	302.3	15.4	231.0	10.1	251.8	10.8
	19	613.5	18	371.9	22	235.4	20	107.5	18	119.4
Females	380.3	20.0	308.1	15.0	276.6	16.2	202.3	10.9	223.3	10.4
	18	446.5	19	249.3	20	289.8	21	131.4	18	120.7

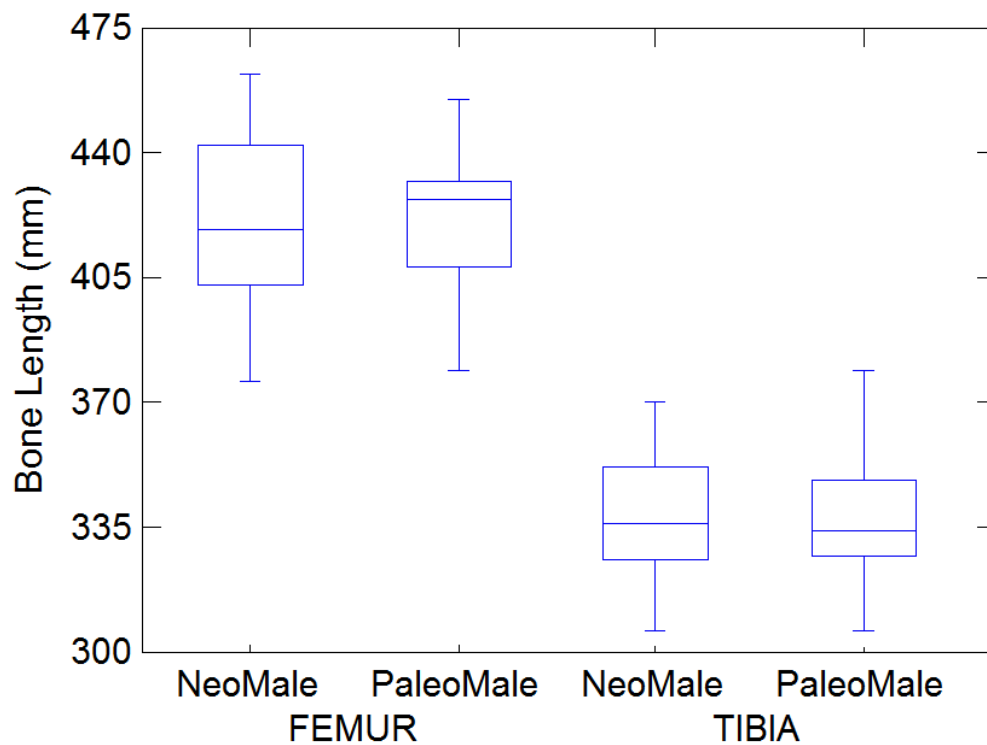


Figure 4. Box Plot of Male Neo- and Paleo-Aleut Femur and Tibia Maximum Length on Y-axis (mm). The distributions are not significantly different ($p < 0.05$).

Table 15. Postcranial Long Bone Robusticity Index Summary Statistics (Mean, Standard Deviation, Sample Size, and Variance) of Paleo- and Neo-Aleut used in Welch's Two-tailed T-tests.

	Femur		Tibia		Humerus	
	Mean	Standard deviation	Mean	Standard deviation	Mean	Standard deviation
	Sample Size	Variance	Sample Size	Variance	Sample Size	Variance
Paleo-Aleut - Males	21.8	1.04	28.6	1.58	8.16	0.55
	18	1.21	17	2.72	19	0.32
Females	20.8	0.88	26.6	0.99	7.7	0.58
	12	0.88	14	1.10	16	0.38
Neo-Aleut - Males	21.9	1.30	28.1	1.55	8.67	0.70
	19	1.87	18	2.66	22	0.32
Females	21.1	1.67	26.3	1.77	7.75	0.70
	17	3.08	17	3.53	22	0.53

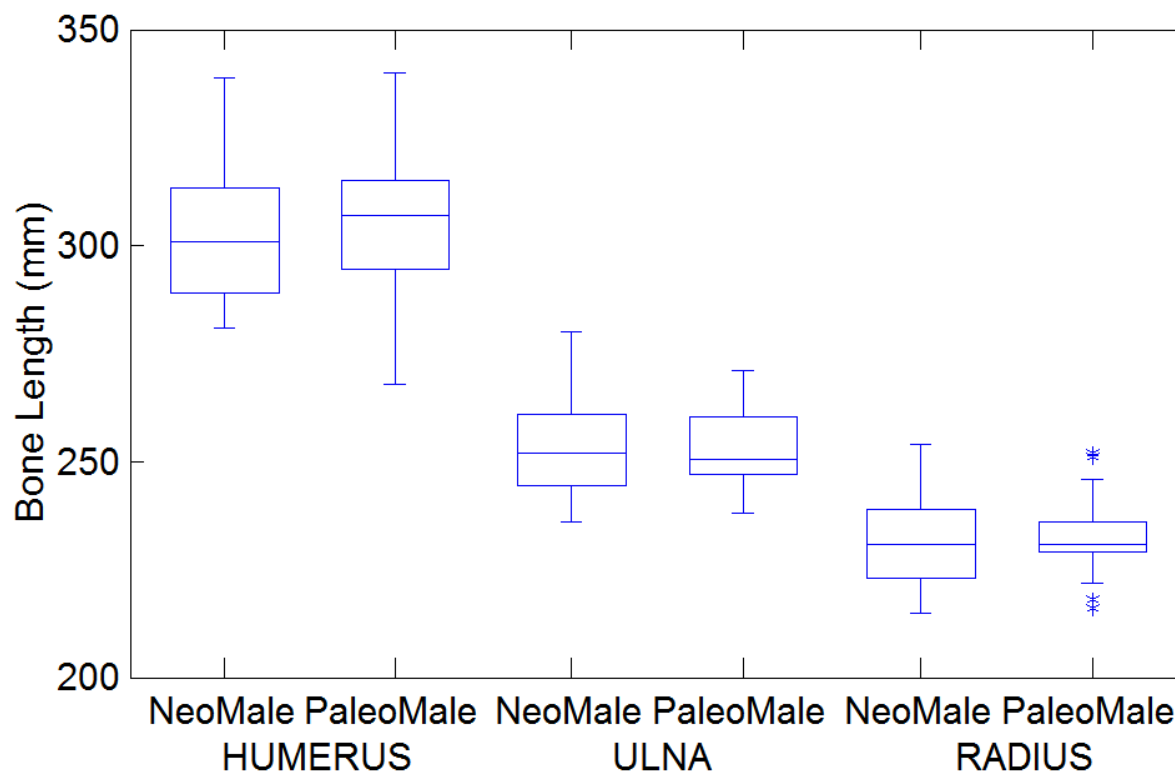


Figure 5. Box Plot of Male Neo- and Paleo-Aleut Humerus, Ulna, and Radius Maximum Length on Y-axis (mm). The Paleo-Aleut radius displays four outliers (*) just beyond the 95% confidence interval bars, however the distributions are not significantly different ($p < 0.05$).

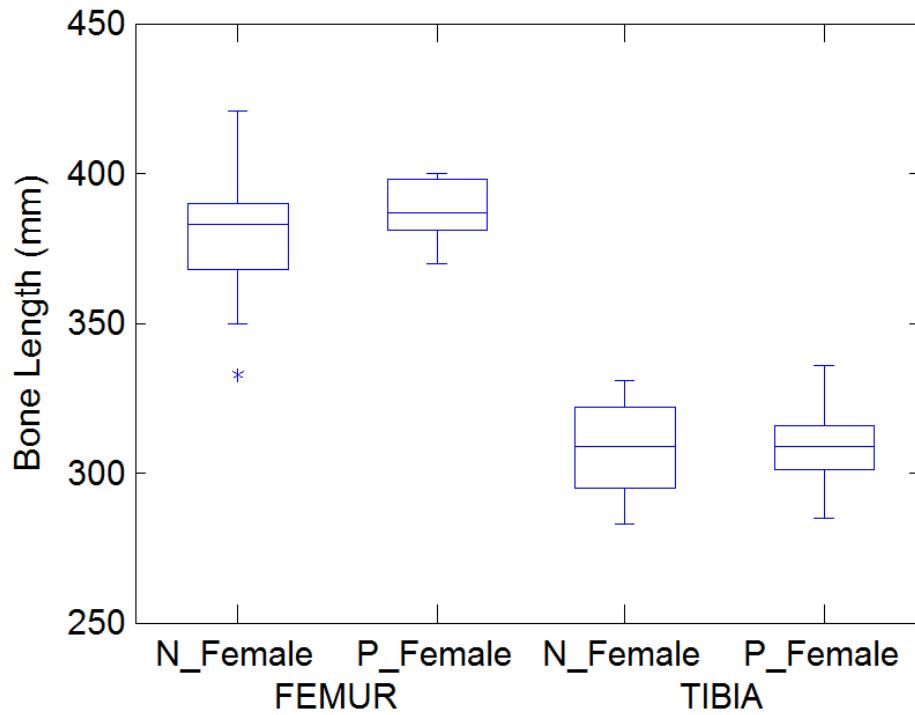


Figure 6. Box Plot of Female Neo- and Paleo-Aleut (N_Female and P_Female) Femur and Tibia Maximum Length on Y-axis (mm). The Neo-Aleut femur displays one outlier (*) below the 95% confidence interval bar, however the distributions are not significantly different ($p < 0.05$).

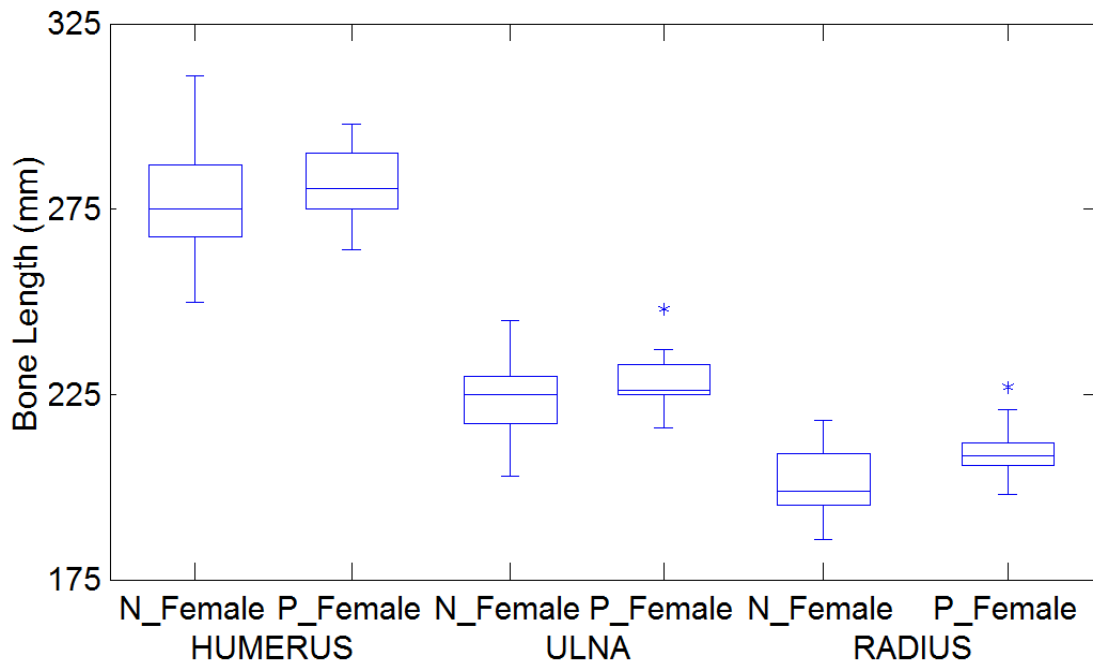


Figure 7. Box Plot of Female Neo- and Paleo-Aleut (N_Female and P_Female) Humerus, Ulna, and Radius Maximum Length on Y-axis (mm). The Paleo-Aleut ulna and radius display one outlier individual (*) above the 95% confidence interval bars, however the distributions are not significantly different ($p < 0.05$).

APPENDIX B: DOCUMENTATION OF HUMAN REMAINS AT THE NATIONAL MUSEUM OF NATURAL HISTORY

The Repatriation Office (RO) at the National Museum of Natural History is charged with complying with the repatriation provisions of the National Museum of American Indian Act. Following the Act, one of the primary functions of the Office is to determine the extent to which human remains held by the Museum are culturally affiliated with contemporary Native American groups. Resolving the identity of the remains can be a time-consuming and challenging task, but it is one the Museum and staff of the RO take very seriously.

Documentation, or the physical examinations of the remains, is an integral part of the repatriation process. It provides one line of evidence used to determine cultural affiliation as required by law. Biological information on the shape and physical condition of the remains is evaluated, along with museum records, archaeological and anthropological information, and traditional knowledge, to help identify Native American groups with whom the remains may be affiliated. Documentation serves to confirm existing museum records. It also forms part of the permanent record of the Museum's compliance with the repatriation mandate, the determination of cultural affiliation, and the arrangements made for transfer of remains to Native representatives. Information assembled and permanently archived at the Museum as a record of repatriation is available to Native groups for their own records and use.

The paragraphs below provide specific details on the kinds of information recorded during documentation and the significance it has to the determination of cultural affiliation.

A listing of skeletal remains present. In each repatriation case, all physical remains that have been requested for return are first retrieved from storage. A detailed list of the skeletal elements in each catalog entry is then created. Due to changes in collection techniques and museum practices over the years, it is not always the case that the remains of a single individual are identified by a single catalog number. Information on the number and type of bones included in each set enables us to approximate the number of individuals present. Discrepancies in the records are noted and corrected. Photographs and x-rays are taken to create a permanent record of the remains for deaccession (the museum's exit procedure) and for future reference.

The age and sex of each individual. Determining the age and sex of the remains helps to establish the total number of individuals present. In cases where the record suggests the remains may pertain to a specific individual, knowing the age and sex is critical to making a final identification. This information is especially helpful for the identification of named individuals or remains from recorded historic incidents. Such information has also proven important to Native groups who accord different burial treatment depending on the age and sex of the individual being interred.

Condition of the remains. The physical condition of the remains provides information about their original location, their manner of treatment following death, and other events that have affected them since that time. Noting the amount of weathering and staining on the bones can help establish whether the individuals were buried and the kinds of objects placed with the body in contexts above or below the ground. This information can be critical to determining an individual's cultural affiliation when historical and archaeological information are unavailable or when the circumstances under which the individual died and the manner in which the remains were treated are poorly understood. For some Native groups, interpreting the condition of the remains has also been important for explaining the course of events following death and preparing them for transport and final burial.

Differences in bone shape. While every person is unique, there are certain physical characteristics, such as facial features and the shape of the skull, that identify people as members of a particular group. In many cases, these differences are known to correspond with ethnic or cultural differences. Observations on the size and shape of skeletal remains are essential for the assessment of cultural affiliation in cases where other evidence is lacking. The shape of the skull, for example, can be used in combination with other forms of evidence to confirm the presence of a particular group in an area well before the existence of written records. Standard measurements and observations of remains of known cultural affiliation also provide critical information needed for future identification of remains held by the Museum whose cultural affiliation is otherwise unknown.

Intentional modification of bone. People sometimes alter their physical appearance to mark their membership in a group or to make themselves more attractive. Some modifications, like piercing of the ears or tattooing, leave no marks on the skeleton. Other activities, such as intentional shaping of the head, carrying infants in cradle boards, and piercing the lip to insert ornaments, change the form of bones or teeth. Because these practices can be characteristic of a particular cultural group, the identification of socially-encouraged modifications of the skeleton can often help in the determination of cultural affiliation.

Information on health and diet from skeletal remains. Skeletal remains are a very important source of information on the quality of life. What foods were eaten, what kind of work was engaged in and how healthy a person was are typically reflected in the human skeleton. Since these conditions vary through time and from culture to culture, obtaining information on the health and diet of an individual can aid in the determination of cultural affiliation. This information also advances our understanding of certain diseases and related health issues of concern to Native people and all Americans.

The National Museum of Natural History is committed to developing a better understanding of the sensitivities and desires of Native groups charged with the responsibility of recovering ancestral remains and associated funerary objects. We hope that our good faith effort

to determine cultural affiliation and to return remains and objects to groups requesting repatriation will form the foundation of more open and collaborative relationships in the future. We will work closely with designated tribal representatives to determine cultural affiliation and to insure that their desires concerning the disposition of the remains are met. A variety of solutions are available, including transfer to the group for burial, continued care of the remains at the museum under guidelines worked out with the group, or transfer of the remains to other institutions, such as regional or Native museums.

APPENDIX C: GLOSSARY

Accession: The process through which an object or collection is officially added to the holdings of the museum. The term also can refer to the body of records created during the process.

Accession Records: The body of records that document an object's first association with the museum, including correspondence and inventory supplied by the collector/donor and the formal records created by the museum to register receipt and acceptance of the contribution.

Anthropology Collections: The collections of the Anthropology Department of the NMNH are separated into three different divisions: 1) Physical Anthropology (human remains), 2) Ethnology (objects collected contemporaneously from the cultural group that created them), and 3) Archaeology (materials recovered from archaeological contexts) and 4) Non-skeletal human remains, which are human remains consisting of non-skeletal tissue.

Associated Funerary Objects: See *Funerary Objects*.

Card Catalog: Record keeping system in the Anthropology Department of the NMNH. Each card in the file contains information on item(s) associated with a specific catalog number. The type of information contained on the cards typically includes a brief description of the item, its collection history, and its provenience. The card catalog continues to be maintained, though its use has been superseded by the computer database.

Catalog Number: Identification number assigned to each item or set of items at the time they are accessioned into the museum.

Catalog Records: The body of formal records created by the museum relating to the assignment of identification numbers and storage locations for each item in the museum's collections. At the Smithsonian, these records consist of the ledger books, card catalog and the computer database.

Collector: The person who acquired human remains or cultural objects from the field. The collector may differ from the donor. For instance, the person who did so and then shipped his or her collection to the Army Medical Museum (AMM) was both the collector and the donor of the AMM materials. If the materials were then transferred to the Smithsonian from the AMM, the collector would remain the same but the AMM would become the donor to the Smithsonian.

Cranium (pl. *Crania*): The bones of the head, excluding the mandible.

Cultural Affiliation: As defined in the Native American Graves Protection and Repatriation Act (PL 101-601), refers to "a relationship of shared group identity that can be reasonably traced historically or prehistorically between a present day Indian tribe or Native Hawaiian organization, and an identifiable earlier group."

Documentation: The summary of museum records, relevant studies, and other data for the purposes of determining the geographical origin and cultural affiliation of human remains and cultural items and the information regarding their acquisition and accession.

Donor: The individual or institution that contributed human remains or cultural objects to the holding institution. The donor may differ from the collector. A collector who acquired materials from the field and then shipped them to the Army Medical Museum was both the collector and donor of the AMM materials. If those items were later transferred to the Smithsonian from the AMM, the collector remained the same but the AMM would become the donor to the Smithsonian.

Ethnographic Summary: Ethnographic object lists prepared to provide Native American communities with information on the scope of the collections in the possession of the museum, the kinds of objects present in the collections, the geographic origins of the materials, how and when the collections were acquired and the possible cultural affiliation of the items. The information in general is based upon data from a variety of records which have been consolidated in the computer database. This information is considered to be unverified until reviewed within the scope of a repatriation assessment.

Funerary Objects: Objects intentionally placed with an individual at the time of death or sometime thereafter as part of the death rite or ceremony of a culture. Funerary objects may be associated or unassociated. Associated funerary objects are objects that are still associated with the remains with which they were originally interred, i.e., both are in the possession of the museum. Unassociated funerary objects are objects that are no longer associated with the human remains with which they were interred and the remains are no longer extant and/or are not in the possession of the museum.

Human Remains: The bones, teeth, tissue, hair, or other body parts of a deceased individual, not including portions that are naturally shed or freely given.

Inventory: An itemized list that summarizes the available information on the human remains or objects in question with respect to geographic and cultural affiliation.

Mandible: The lower jaw.

Non-statutory Object: An object that does not fit the definition of funerary object under the NMAI Act.

Objects of Cultural Patrimony: The 1996 amendment to the NMAIA requires the Smithsonian to follow the definition from NAGPRA for objects of cultural patrimony, which are objects having ongoing historical, traditional, or cultural importance to the Native American group or culture itself. These objects, because of their central importance to the group, would not be

considered the property of any particular individual and, therefore, could not be alienated, appropriated, or conveyed by an individual.

Postcrania: The bones of the body excluding the skull.

Preponderance of Evidence: Legal standard which requires that the evidence as a whole show that something is more probable than not; proof need not be conclusive, but the evidence in one direction must have the greater weight.

Provenience: The point of origin or collection site of a specific object or set of remains.

Repatriation: The return of Native American human remains or cultural items to culturally affiliated Native American tribes or Native Hawaiian organizations.

Repatriation Review Committee: Committee of seven individuals appointed by the Secretary of the Smithsonian Institution from nominations submitted by federally-recognized Native American tribes and Native American, anthropological, and museum organizations. The purpose of the committee is to monitor and review the inventory, identification and the return of Native American human remains and cultural items for the Smithsonian Institution. The specific functions of the committee are (1) to ensure fair and objective consideration and assessment of all relevant evidence; (2) to review, upon the request of any affected party, the findings relating to the origins or return of any remains or objects; and (3) to facilitate resolution of any dispute that may arise between Indian tribes regarding the return of remains or objects.

Sacred Objects: As defined in the Native American Graves Protection and Repatriation Act (P.L. 101-601), refers to "specific ceremonial objects required by traditional Native American religious leaders for the practice of traditional Native American religions by their present-day adherents. While many items, from ancient pottery sherds to arrowheads, might be imbued with sacredness in the eyes of an individual, these regulations are specifically limited to objects that were devoted to a traditional Native American religious ceremony or ritual and which have religious significance or function in the continued observance or renewal of such ceremony."

Skull: All of the bones of the head, including the mandible and cranium.

Tracking Number: A Repatriation Office Tracking number (such as P378250 RO Tracking Number 1) is assigned to a single commingled bone within a catalog number when that bone does not belong to the individual representing the majority of skeletal elements in the catalog number. In many cases a single catalog number may contain several RO Tracking Numbers, but these commingled and tracked bones do not belong to a single individual. In addition, tracked bones are consistent with more than one individual from that archaeological site or series, and therefore cannot be positively reassociated to another catalog number. Typically RO Tracking Numbers do not contribute to the calculation of minimum number of individuals within an

archaeological site, since they could belong to other individuals, unless much of the site is commingled. The RO Tracking number is assigned in order to permit documentation of that bone into the database and possibly allow reassociation to another catalog number in the future if more information is discovered.

Unassociated Funerary Objects: See Funerary Objects.